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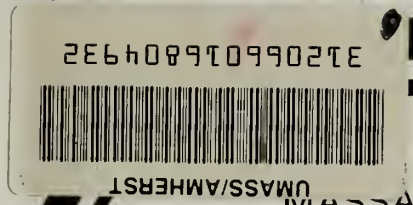

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

STD CONTROL DIVISION

STD AND WOMEN

TREND ANALYSIS 1985-1994

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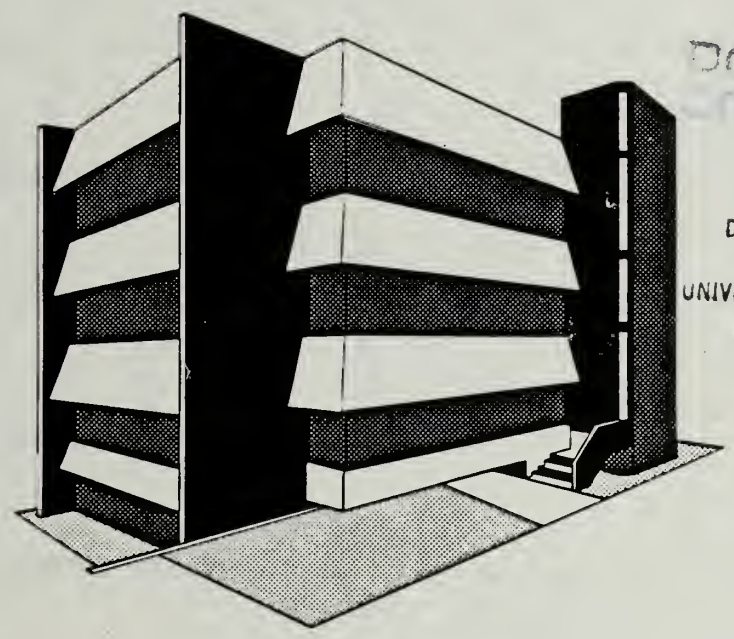

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TABLE OF CONTENTS

PAGE

OVERVIEW OF TRENDS IN STDs IN WOMEN 1985-1994.....1.

SYPHILIS PROFILE.....3.

GONORRHEA PROFILE.....5.

CHLAMYDIA PROFILE.....7.

PELVIC INFLAMMATORY DISEASE.....9.

ECTOPIC PREGNANCY.....11.

HUMAN PAPILLOMAVIRUS INFECTIONS.....11.

AIDS IN MASSACHUSETTS WOMEN.....13.

THE ROLE OF DISEASE REPORTING.....14.

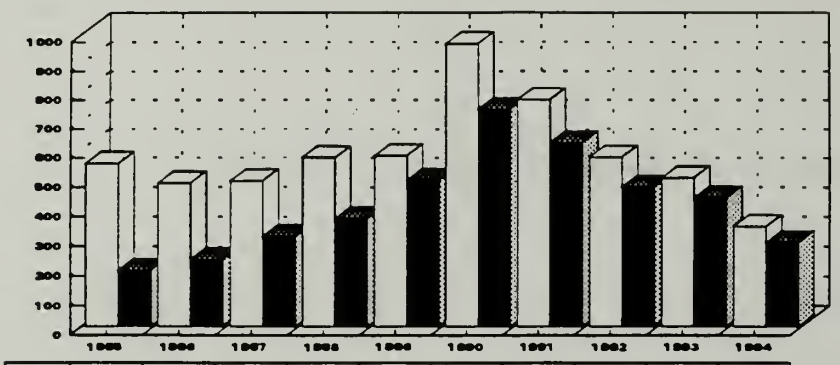
REFERENCES.....16

ADDENDUM.....17

THIS REPORT WAS PREPARED BY MICHAEL WHELAN R.N., SYLVIE RATELLE M.D.,M.P.H., WITH SIGNIFICANT CONTRIBUTION BY CHRISTOPHER KEENAN, MD, OF THE PREVENTIVE MEDICINE RESIDENCY PROGRAM OF THE UNIVERSITY OF MASSACHUSETTS.

REPORTED STD BY GENDER 1985-1994

Massachusetts Syphilis 1985-1994
Male vs. Female Reported Cases

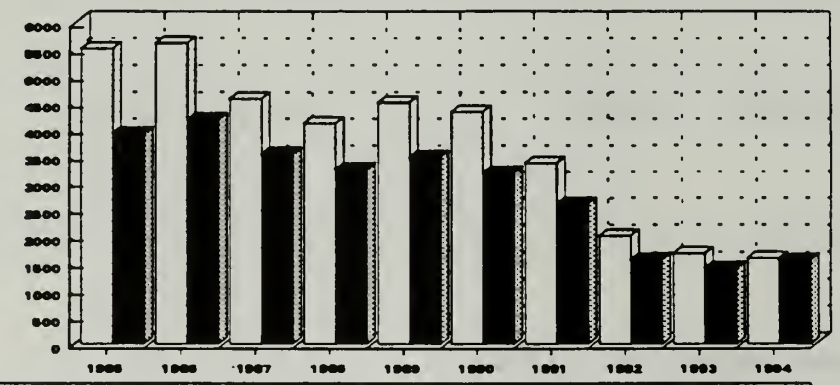


	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Male	551	483	481	571	578	985	771	572	501	336
Female	188	227	303	363	494	738	623	471	433	282

Male Female

Mass STD Surveillance
SYPHMF.CHG

Massachusetts Gonorrhea 1985-1994
Male vs. Female Reported Cases

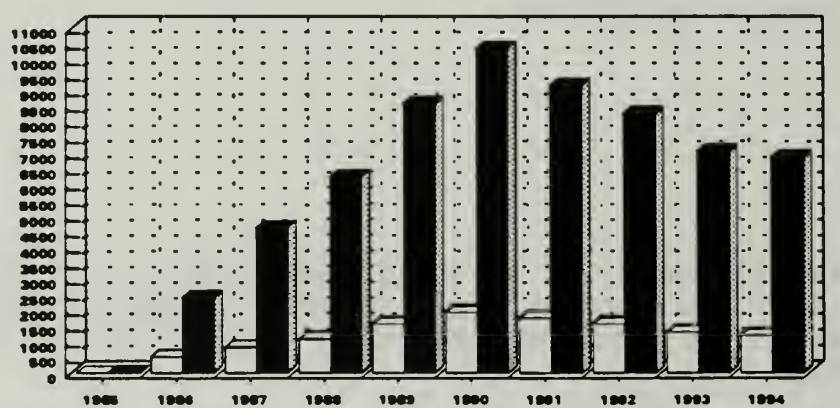


	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MALE	5515	6621	4561	4117	4512	4336	3376	2006	1681	1597
FEMALE	3936	4196	3561	3261	3491	3166	2603	1674	1416	1366

MALE FEMALE

Mass STD Surveillance
ASTDGNF.CHG

Massachusetts Chlamydia 1986-1994
Male vs. Female Reported Cases



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MALE	11	825	831	1081	1559	1922	1741	1564	1295	1196
FEMALE	25	2411	4633	8215	8565	10327	9144	8241	7032	6850

MALE FEMALE

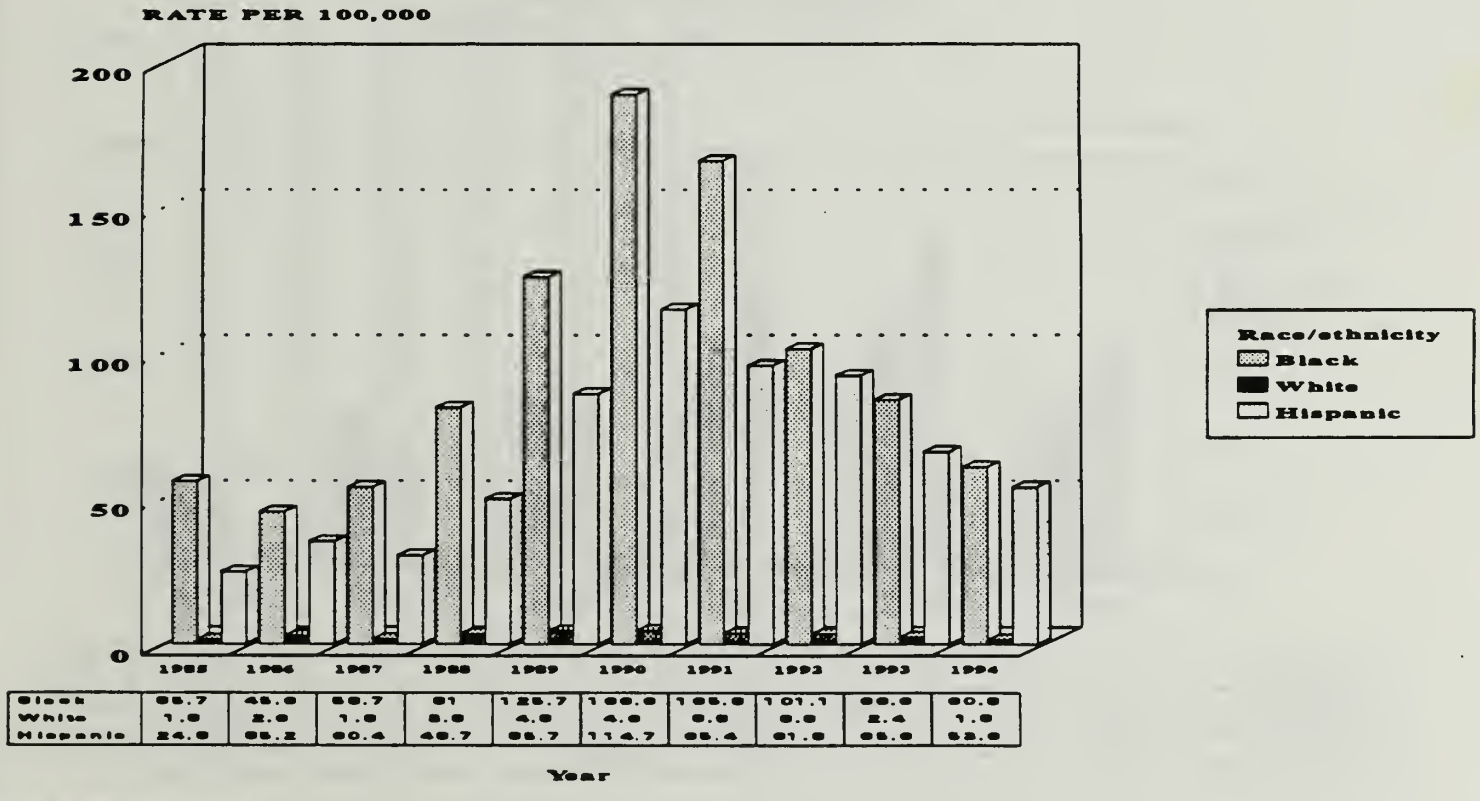
Mass STD Surveillance
ASTDCHF.CHG

SYPHILIS

Beginning in 1986, a dramatic increase in cases of syphilis occurred in heterosexual men and women and this increase was paralleled by an increase in congenital syphilis (1). Rates peaked in 1990. The increase was associated with an increase of substance abuse, particularly crack cocaine. Rates of syphilis have decreased dramatically since 1990.

The incidence of syphilis (all ages, all stages) was lower among women than men from 1985 to 1992. This gap is gradually narrowing. Higher rates are observed among minority women throughout the years and across all ages. In 1994, rates for syphilis were 61 per 100,000 and 54 per 100,000 for black women and Latinas respectively vs 2 per 100,000 for white women. Rates are highest in women 20 to 34 years of age. On the following pages syphilis trends in women are detailed by age race/ethnicity and gender.
(please see addendum for additional graphs and data)

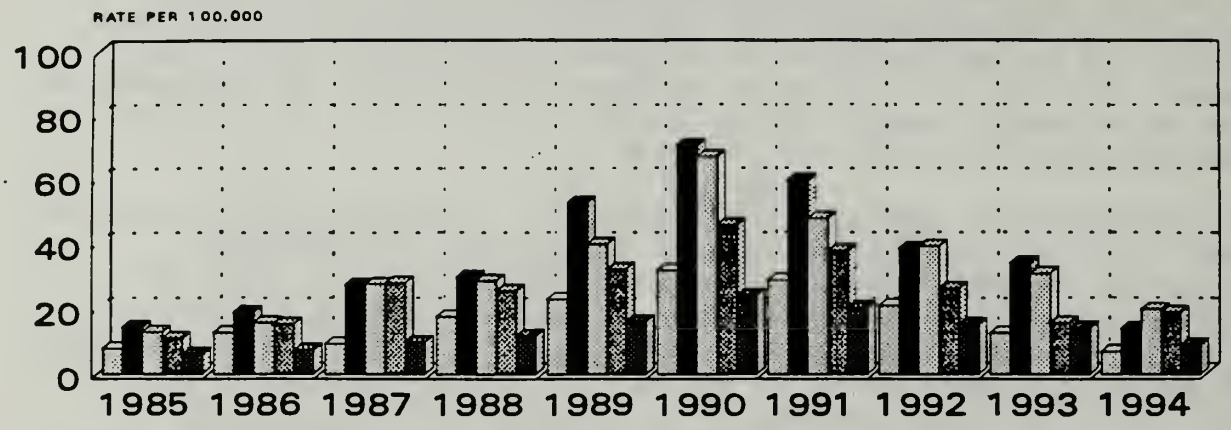
Syphilis in Women, All Ages



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Black	65.7	48.8	58.7	81	125.7	188.8	165.8	101.1	88.8	80.8
White	1.8	2.8	1.8	3.8	4.8	4.8	5.8	5.8	2.4	1.8
Hispanic	24.8	35.2	30.4	48.7	65.7	114.7	85.4	61.8	65.8	53.8

MDPH STD Division

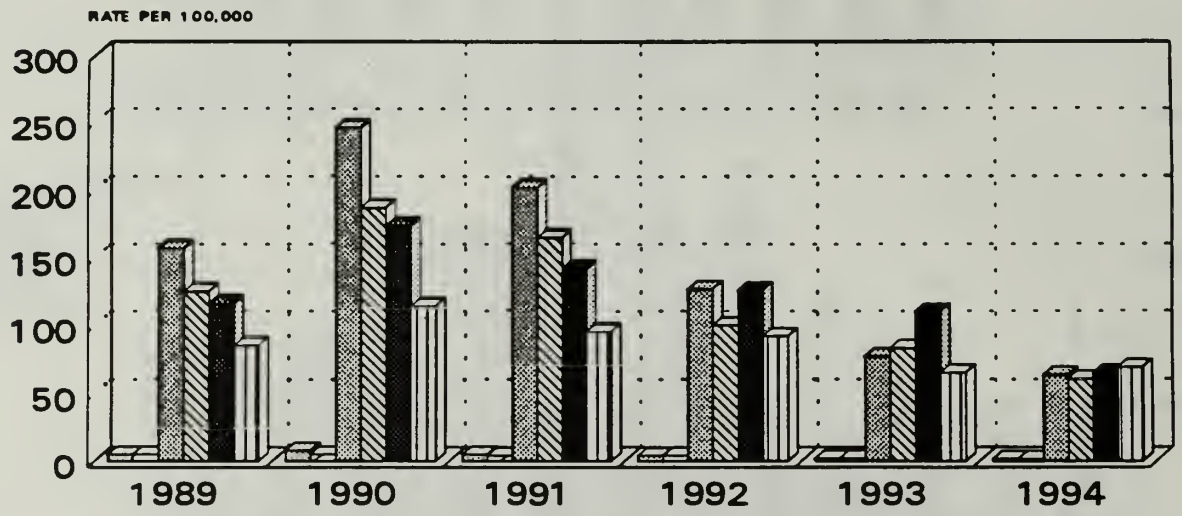
SYPHILIS IN MASSACHUSETTS WOMEN
By Age



15-19	7.9	12.8	9.3	17.7	23.1	31.9	29	21.1	12.8	7
20-24	14.4	19	27.6	29.9	52.8	70.7	59.8	38.5	34.2	14
25-29	12.9	15.8	27.7	28.7	39.9	67.2	47.8	39.2	30.9	20
30-34	11	15.4	28.2	25.7	32.3	45.8	37.8	26.4	15.8	19
ALL AGES	6.2	7.4	9.9	11.9	16.2	24.2	20.4	15.4	14.2	9

MDPH, STD DIVISION
SYAGE.CH3

MASSACHUSETTS SYPHILIS
ALL AGES BY RACE AND GENDER



WHITE MALE	5	9	5	4	2	1.6
WHITE FEMALE	5	5	4	4	2	1.5
BLACK MALE	157	246	202	127	77	63.5
BLACK FEMALE	125	197	165	100	83	60.5
HISPANIC MALE	116	174	142	126	110	85
HISPANIC FEMALE	85	114	95	92	85	69

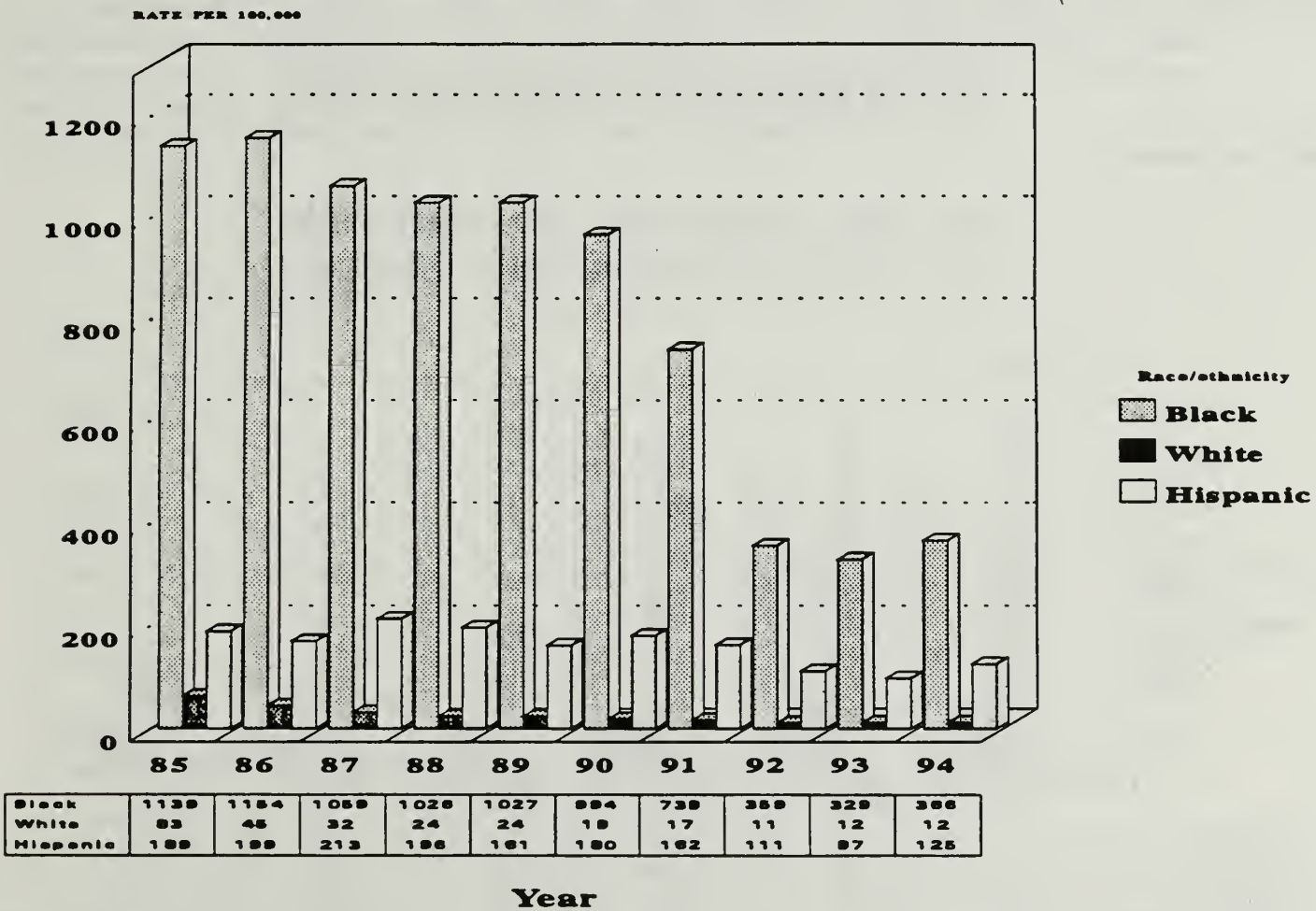
ALLMASY.CH3

GONORRHEA

Gonococcal infections have decreased steadily in the U.S. since 1985 (2). Similar trends are observed in Massachusetts, with dramatic declines occurring in 1992. However, **in 1994 gonorrhea rates rose for the first time in ten years.** Gonorrhea still overwhelmingly affects minority women, particularly black women. Furthermore, declining trends have not been as dramatic for Latinas. In 1994, rates were 366 per 100,000 and 125 per 100,000 for black women and Latinas respectively vs 12 per 100,000 for white women. Rates are highest in women 15 to 19 years of age.

Complications of gonorrhea include the ascension of the organism from the cervix to the upper genital tract, thereby causing pelvic inflammatory disease.
(please see addendum for additional graphs and data)

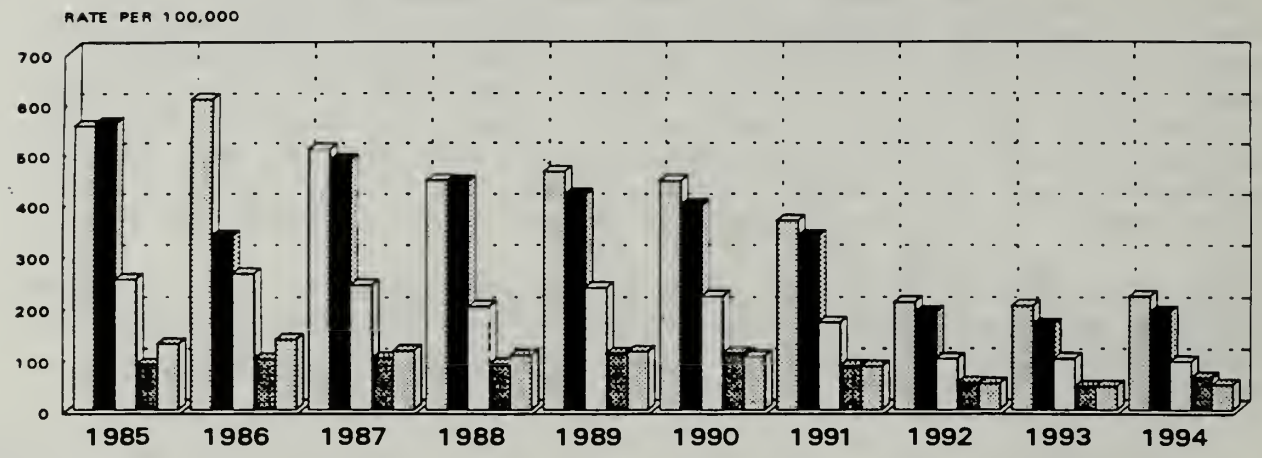
Gonorrhea in Women, All Ages



	85	86	87	88	89	90	91	92	93	94
Black	1138	1184	1058	1026	1027	894	738	369	329	366
White	83	45	32	24	24	18	17	11	12	12
Hispanic	188	198	213	196	181	180	162	111	87	125

MDPH STD Division

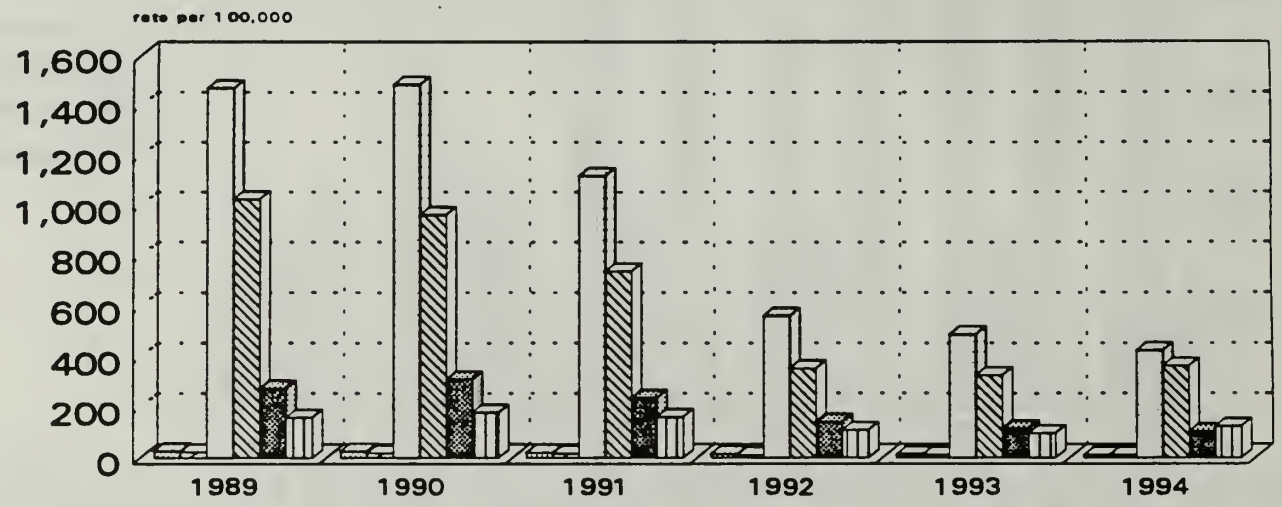
GONORRHEA IN MASSACHUSETTS WOMEN
By Age



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
15-19	554.7	608.1	508.2	446.4	463.7	445.4	366.8	210.1	203.1	221
20-24	561.4	336.4	487.1	444.8	418.8	397.8	336.8	191.9	167.8	191.5
25-29	253.3	264.1	242.6	200.9	237.1	220.6	170.3	99.9	100.9	94.9
30-34	89.1	100.5	101.9	89.5	110.8	110.8	86.6	53.5	46.6	64.2
ALL AGES	129	137.5	116.3	106.8	114.3	104.4	85.3	51.6	46.4	50

MDPH, STD DIVISION
[illegible]

MASSACHUSETTS GONORRHEA
ALL AGES BY RACE AND GENDER



	1989	1990	1991	1992	1993	1994
WHITE MALE	26	27	22	16	15	12.5
WHITE FEMALE	24	19	17	11	12	12
BLACK MALE	1,471	1,485	1,120	564	491	427
BLACK FEMALE	1,027	964	739	356	329	366
HISPANIC MALE	277	313	236	143	117	105
HISPANIC FEMALE	161	180	162	111	97	125

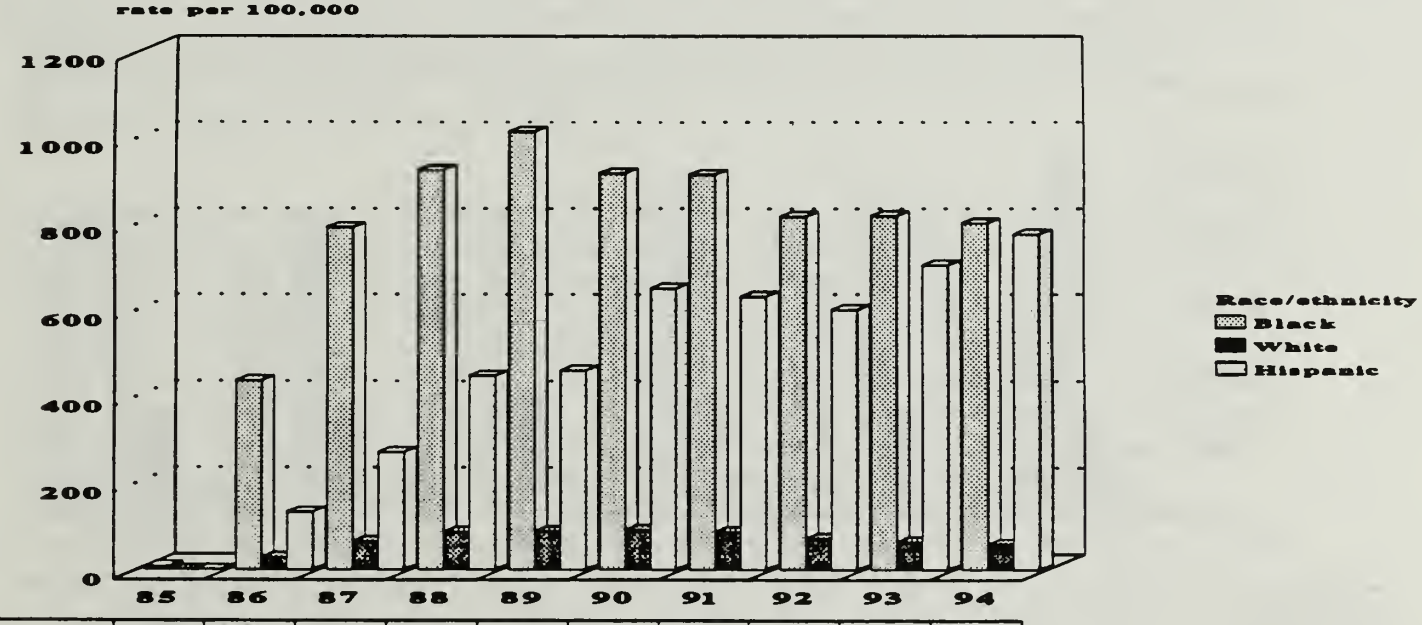
MASS. STD SURVEILLANCE
ALLMAGC.CH3

CHLAMYDIA

Case rates for chlamydial infections continue to rise nationally, but this increase reflects the growing number of states that have included *Chlamydia trachomatis* in their list of reportable infections. In 1985 Chlamydia became a reportable disease in Massachusetts and is the most frequently reported bacterial STD. Chlamydia accounts for the highest rate of an STD in women. Chlamydia rates peaked in 1990. Aggregated numbers have since been gradually decreasing, but less dramatically than for gonorrhea and syphilis. As previously mentioned, rates are higher among women than men across all ages and race/ethnicity. This can be partially explained by the fact that women are screened more extensively than men for this infection. An analysis of 1987-1991 surveillance data for chlamydial infection revealed that 11.9% of women with one or more chlamydial infection during that time period were also infected with at least one other STD. In the state funded STD clinics, coinfection with gonorrhea occurred in 11.5 % of women infected with chlamydia in 1994. Minority women are overwhelmingly affected and rates have been increasing among Latinas. In 1994, rates were 801 per 100,000 and 775 per 100,000 for black women and Latinas respectively vs 59 per 100,000 for white women. Rates are highest in the 15 to 24 year age groups. **Chlamydial infections, often asymptomatic, are the leading cause of pelvic inflammatory disease (PID) and its sequelae of chronic pelvic pain, ectopic pregnancy and infertility.**

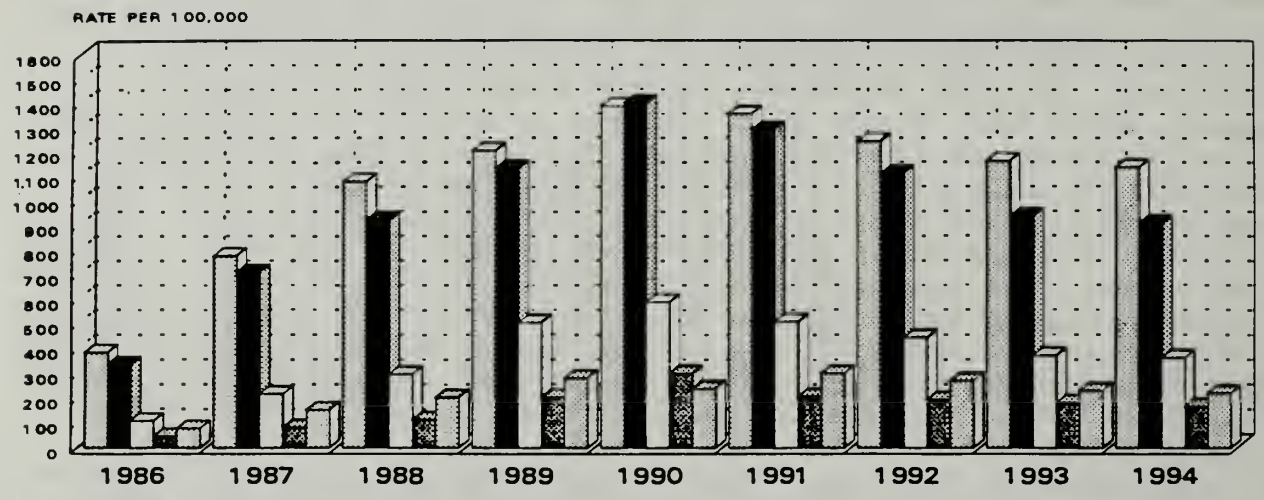
(please see addendum for additional graphs and data)

Chlamydia in Women, All Ages

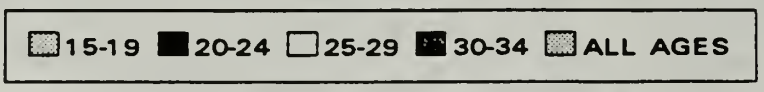


	85	86	87	88	89	90	91	92	93	94
Black	8	437	791	924	1014	917	914	817	818	801
White	0.2	29	66	87	89	92	87	72	64	59
Hispanic	0.6	133	271	448	460	649	630	600	703	775

CHLAMYDIA IN MASSACHUSETTS WOMEN
By Age

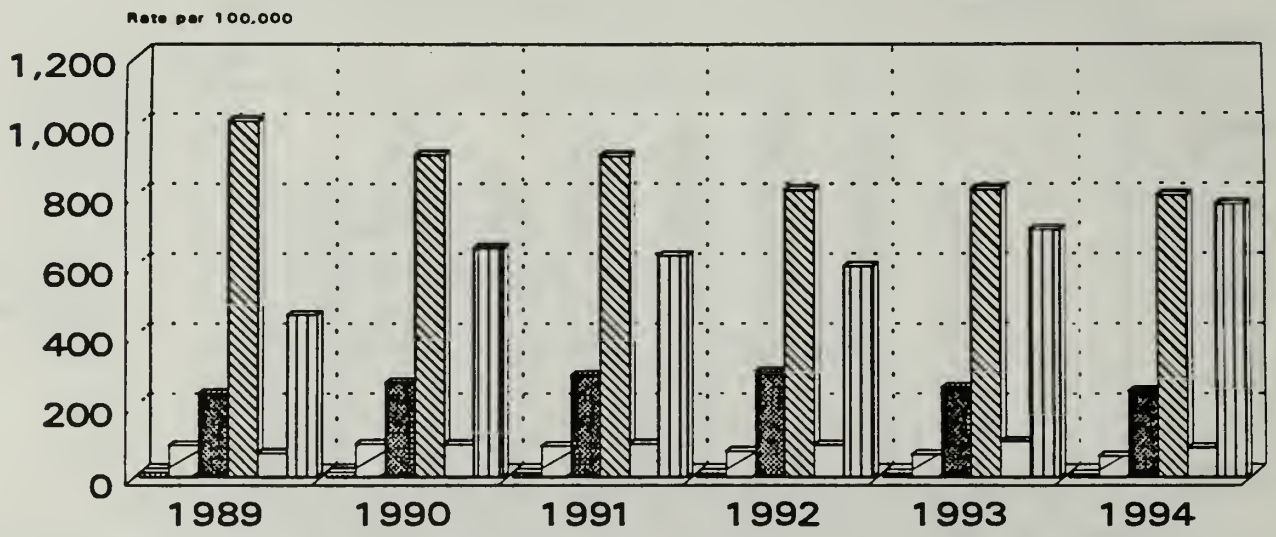


15-19	384.8	774.3	1077.8	1203.4	1387.4	1357.1	1241	1159.4	1134.7
20-24	338.4	708.3	922.8	1131.8	1400.8	1291.9	1108.9	935.2	909.9
25-29	107.8	217.4	295.8	504.9	587.2	508.5	443.5	370.5	381.9
30-34	46.2	82.9	114	205.4	300.8	207.9	194.4	181.9	187.3
ALL AGES	79	151.8	203.8	280.7	238.3	299.5	270	230.4	219



MDPH, STD DIVISION
CWAGE.CH3

MASSACHUSETTS CHLAMYDIA
ALL AGES BY RACE AND SEX



WHITE MALE	13	14	11	10	9	7
WHITE FEMALE	89	93	87	72	64	69
BLACK MALE	236	267	288	296	254	244
BLACK FEMALE	1,014	917	914	617	816	801
HISPANIC MALE	67	81	93	90	101	63
HISPANIC FEMALE	460	849	830	600	703	775

MASS. STD SURVEILLANCE
ALLMACL.CH3

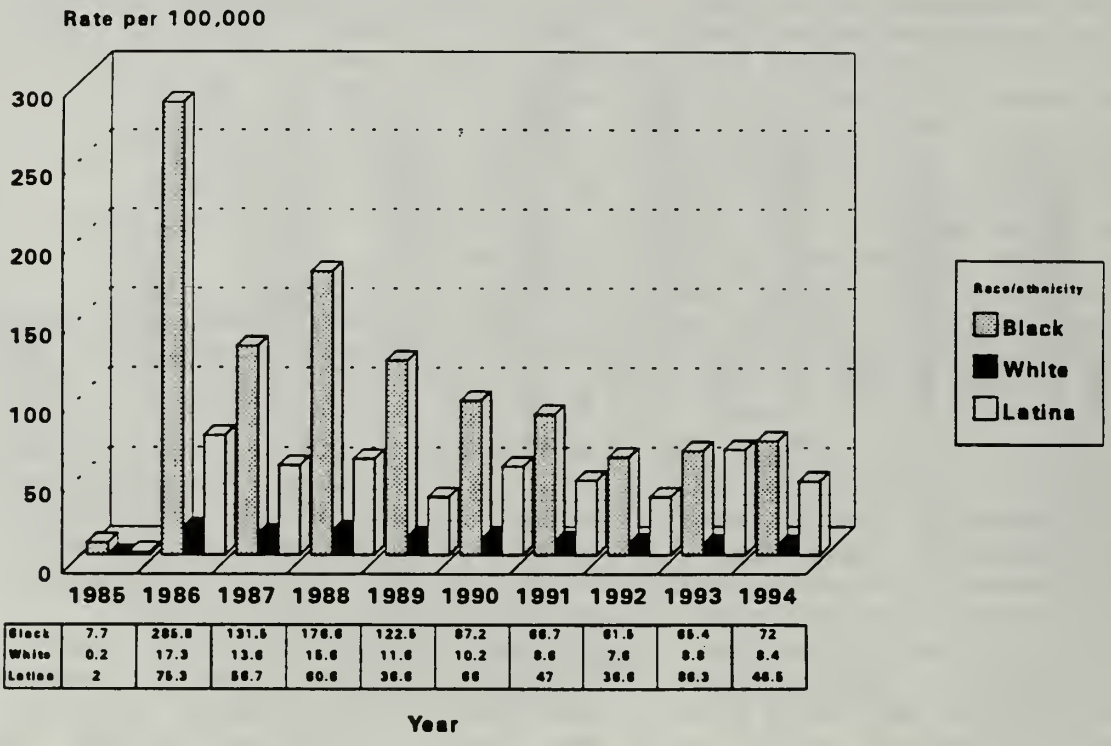
PELVIC INFLAMMATORY DISEASE

Pelvic inflammatory disease (PID) is the terminology generally used to describe upper genital tract infection (uterus, tubes, ovaries and contiguous structures). Most cases of PID are caused, or at least initiated, by the ascension from the cervix of sexually transmitted pathogens, particularly Chlamydia trachomatis. A polymicrobial etiology is often found. The clinical diagnosis of PID may be difficult. Correlating epidemiologic data with clinical evaluation increases the sensitivity and specificity of diagnosis.
With the recognition of the existence and frequency of mild/subclinical disease and its reproductive sequelae, the trend has been to maintain a low threshold for the diagnosis of PID.

Nationally, hospitalizations for PID among women 15-34 years of age have been declining since 1982 (3). This can be explained by the decrease in the number of severe cases of PID requiring hospitalization, decrease in the rates of gonorrhea (often causing more clinically severe cases of PID than chlamydia), general trends in decreased hospitalization for medical conditions, and increased out-patient management with newer antimicrobials. Furthermore, chlamydial infections, in contrast to gonorrhea, may have a more indolent or even asymptomatic course of disease, which will not lead to hospitalization. Rates of hospitalization for acute PID were highest among women aged 15 to 25. Declines in hospitalization for PID were less for the 15 to 19 year old age groups. This may be explained by the higher rates of STDs in this age group, as well as the more aggressive approach to treatment recommended by professional organizations. Initial visits to physician' offices for PID have remained relatively constant, ranging from 350,000 to 450,000 visits annually over the last decade (4).

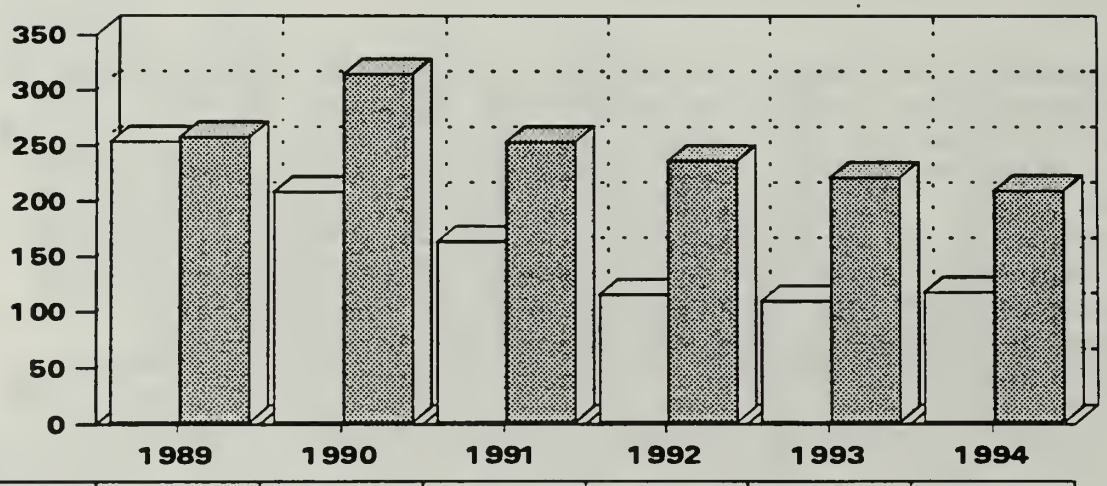
In Massachusetts, although the number of cases of PID reported to the Division has declined, the proportion of cases of PID attributed to chlamydia has increased from 12.8% in 1986 to 45.1% in 1994. As seen nationally, rates are higher among young women (15-24 year olds), the population that suffers the greatest loss from the sequelae of PID. Although both black and white females have seen sustained declines in the rates of reported PID since 1986, no significant change has been seen in the PID case rate for Latinas. According to the Massachusetts Rate Setting Commission's Report on Preventable Hospitalizations issued in January 1994, the number of hospitalizations due to PID for 1989 and 1990 was 4090 and total charges accrued were $ 18 million.

PID Rate, Women all ages



Black	7.7	285.8	131.5	176.6	122.5	87.2	66.7	61.5	65.4	72
White	0.2	17.3	13.6	15.6	11.6	10.2	8.6	7.6	8.8	8.4
Latina	2	75.3	56.7	60.6	36.6	66	47	36.6	86.3	46.5

Massachusetts PID by causative agent



PID GC	252	207	162	114	108	116
PID CHL.	256	313	252	235	220	208

Mass. STD Surveillance
MAPID2.CH3

ECTOPIC PREGNANCY

Over the period 1970-1989, the ectopic pregnancy rate increased almost fourfold nationally (5). Although accounting for less than 2 percent of all pregnancies, ectopic pregnancy was associated with more than 10 percent of all pregnancy-related deaths. Fortunately, mortality rates for ectopic pregnancy have been trending downwards despite an opposite trend in incidence. The highest incidence and mortality rates are seen among 15 to 19 year old women and women of color. In Massachusetts, hospitalizations due to ectopic pregnancy in 1989 and 1990 totaled 3610 and accounted for $ 17 million in charges. In 1993, there were 1409 discharges that led to $ 8.6 million in charges (6).

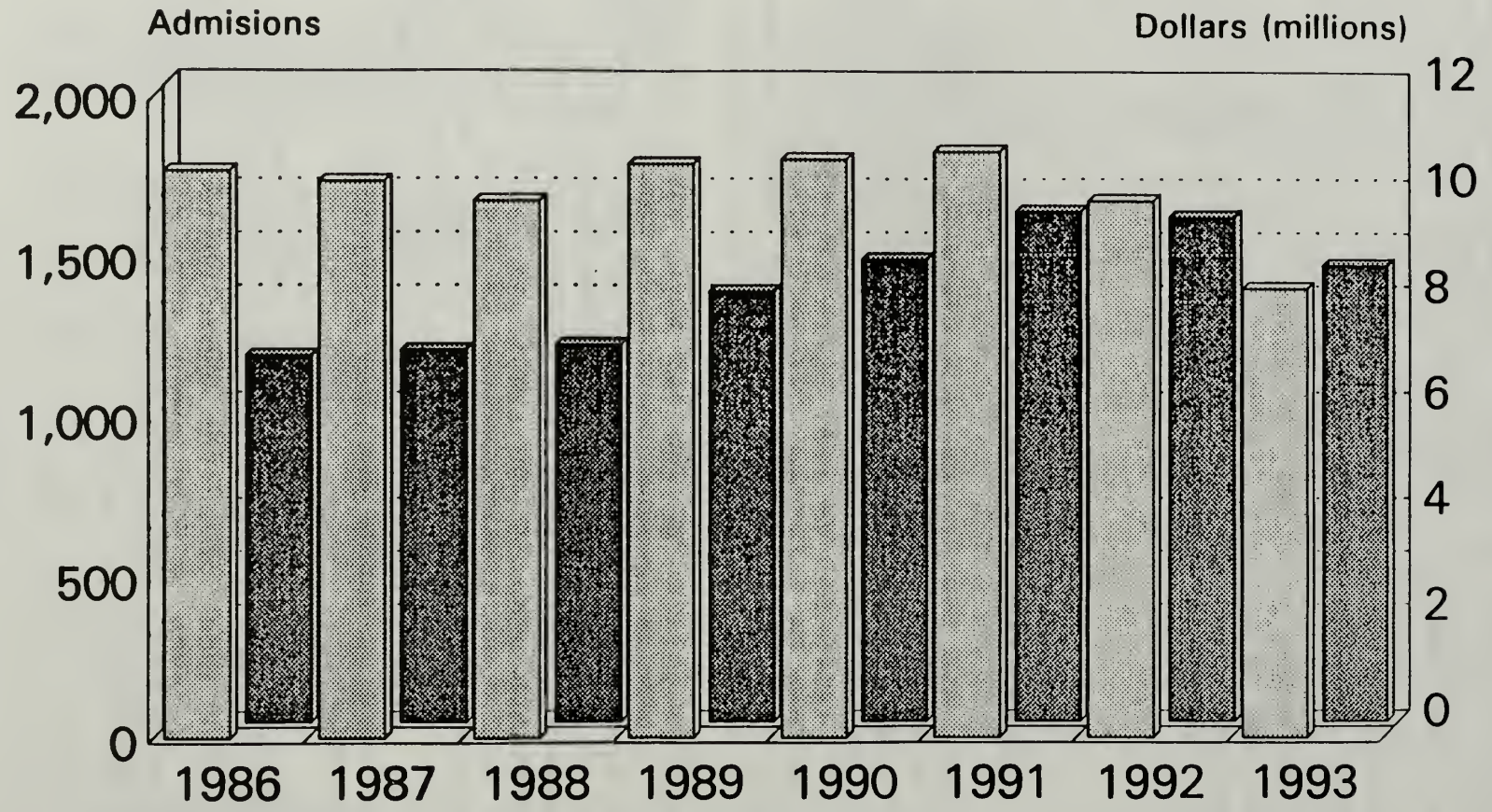
HUMAN PAPILLOMAVIRUS INFECTIONS

Nationally, an accurate evaluation of prevalence of human papillomavirus infections (HPV) is difficult because the infection is not reportable (except for Massachusetts), the disease is often subclinical, progression and regression occurs, and sensitivity of detection varies. It is estimated that 20 to 40 million persons may be infected. Office visits for HPV increased sharply from 1966 to 1991 (7). Most cases are seen in young adults with a peak in late teens and early twenties.

Human papillomavirus infects epithelial cells (skin and mucus membranes). The infection is most often multicentric. Clinical spectrum varies from sub-clinical disease to overt condylomata acuminata. Over 60 subtypes of HPV have been identified. HPV type 6 and 11 are generally associated with benign condylomata acuminata. Certain subtypes of HPV (16,18,31,33,35,39) are associated with malignant transformation of vulvar, vaginal and cervical epithelium and more than 90% of cervical cancer biopsies contain their DNA, with HPV 16 and 18 being the most frequently isolated (8). The association between some types of HPV and malignant transformation makes the high prevalence of this STD particularly ominous.

In Massachusetts, HPV as a clinical syndrome of genital condylomata has been reportable since September 1992. It is not possible to assess trends, given the short period of available data. In 1993, 2314 cases (475 in women) were reported to the Division. Under-reporting is a significant problem. 1994 data is currently under analysis.

ECTOPIC PREGNANCIES, MASSACHUSETTS 1986-1993
Hospital Admissions and Charges



	1986	1987	1988	1989	1990	1991	1992	1993
Admissions	1,774	1,743	1,681	1,797	1,811	1,836	1,683	1,409
Charges	6.9	7	7.1	8.1	8.7	9.6	9.5	8.6

Admissions Charges

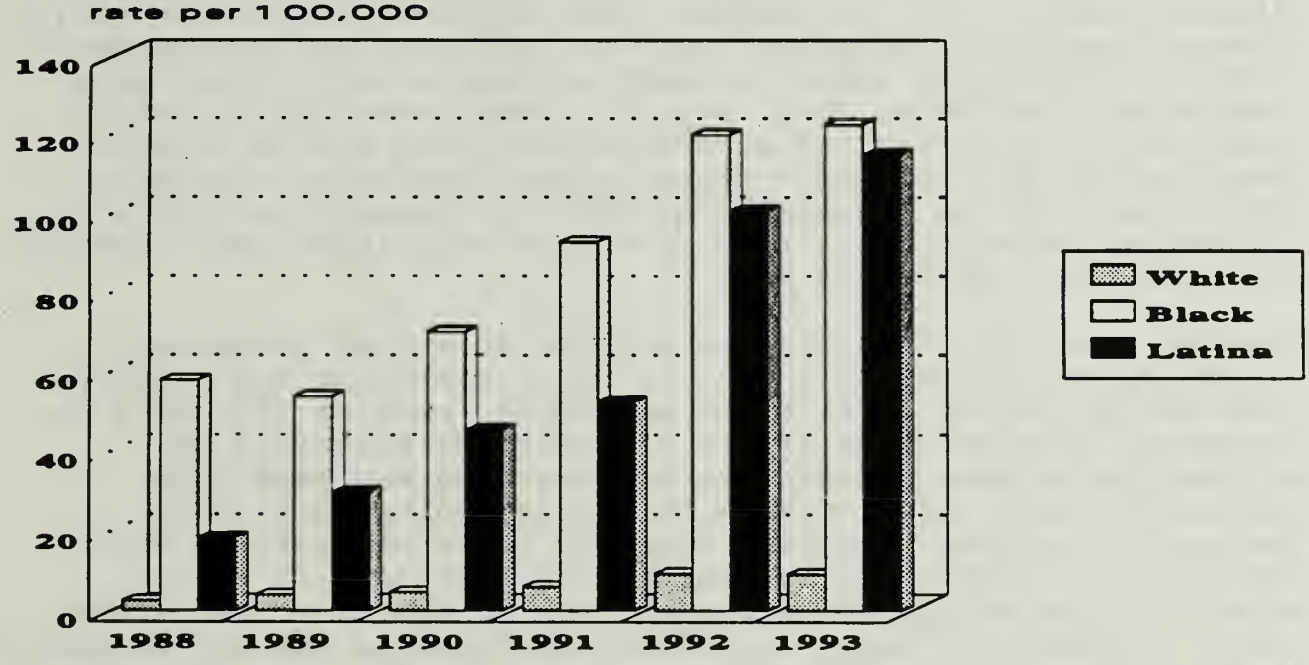
Mass. Rate Setting

AIDS (HIV INFECTION)

Among U.S. women 25 to 44 years old, HIV infection is the second leading cause of death for Blacks, the third leading cause for Latinas, and the sixth leading cause for Whites (9). In Massachusetts, the proportion of AIDS cases occurring annually among adult women has been increasing steadily since 1983. The expanded AIDS definition implemented in 1993 has led to an increased proportion of women being reported with AIDS. In addition to the 23 clinical conditions in the previous AIDS surveillance definition, the expanded definition includes pulmonary tuberculosis, recurrent pneumonia, and invasive cervical cancer. It also includes persons with CD4+ T-lymphocyte counts of less than 200 cells per mm3 or a CD4+ percentage of total T-cells of less than 14% (10).

Women account for 16 % of cumulative cases of AIDS, and for 22% of cases reported in 1993. Heterosexual transmission was the reported mode of transmission in 35% of cases. Women of color are disproportionately affected.

AIDS in Women, Age 18-44
By Year of Diagnosis



MDPH AIDS Surveillance (1994)

THE ROLE OF DISEASE REPORTING

It would be impossible to compile this report and describe the epidemiology of STDs in women without data from reported cases of sexually transmitted disease. The detection, treatment and control of STDs requires the active collaboration of private health care providers, public health workers, and communities at greater risk. State law requires that sexually transmitted diseases be reported directly to the Division of STD Control to assure confidentiality and rapid reporting. These reportable infections include syphilis, gonorrhea, chlamydia, ophthalmia neonatorum, neonatal herpes, chancroid, granuloma inguinale, lymphogranuloma venereum (LGV), PID and genital warts. Gonorrhea and syphilis have been reportable diseases in Massachusetts for decades. Chlamydial infections became reportable in 1985 and condylomata (genital warts) in 1992. Pelvic inflammatory disease (PID) is also reportable directly to the STD Division. AIDS is reportable directly to the AIDS Surveillance Program.

While confidentiality is the most important issue in STD surveillance, the question of data bias in the system must be addressed. The Division does not rely on clinician reporting alone. Laboratory reporting of significant findings is also required, thereby capturing cases unreported by clinicians.

Reporting enables the Division to monitor STD trends and epidemics, identify areas of high morbidity and focus prevention efforts to at-risk communities. In Massachusetts, the extent of under-reporting of disease, particularly clinical diagnosis of disease such as PID, is unknown. Data suggests under-reporting is disease-specific. Laboratory surveys indicate that approximately 90% of confirmatory syphilis tests are performed by the State Laboratory Institute. Thus, syphilis case reporting is fairly complete. In contrast, an automated reporting system recently established with the major microbiology laboratory serving a health maintenance organization (HMO), increased that HMO's chlamydial reporting six-fold (the case definition for chlamydia is a positive laboratory test).

The Division is continuing its efforts to expand laboratory reporting to reduce the extent of under-reporting and promote provider reporting of clinical syndromes, such as PID. This is important to reduce the effect of reporting practices on epidemiologic data. Indeed, under-reporting may mask high prevalence rates of disease within a community. Similarly, geographic regions reporting high STD rates may reflect more conscientious reporting by health care providers or a more elaborate system for screening and reporting than other areas where screening is less extensive, reporting is lax or the public health infrastructure is underdeveloped. Providing accurate and complete information when reporting is also crucial for the

validity of the data.

All rates were calculated on the basis of the 1990 national census data for Massachusetts. Using reported morbidity by age, gender, race and ethnicity when specified, rates per one hundred thousand were calculated. Data for race and ethnicity were compiled using the reported cases with this data available only. If non-specified demographic information were included and apportioned to categories according to the distribution of morbidity, absolute numbers would increase, rates would sometimes be higher, but relative differences would remain the same. If all non-specified data for race and ethnicity were attributed only to white population, significant differences would remain.

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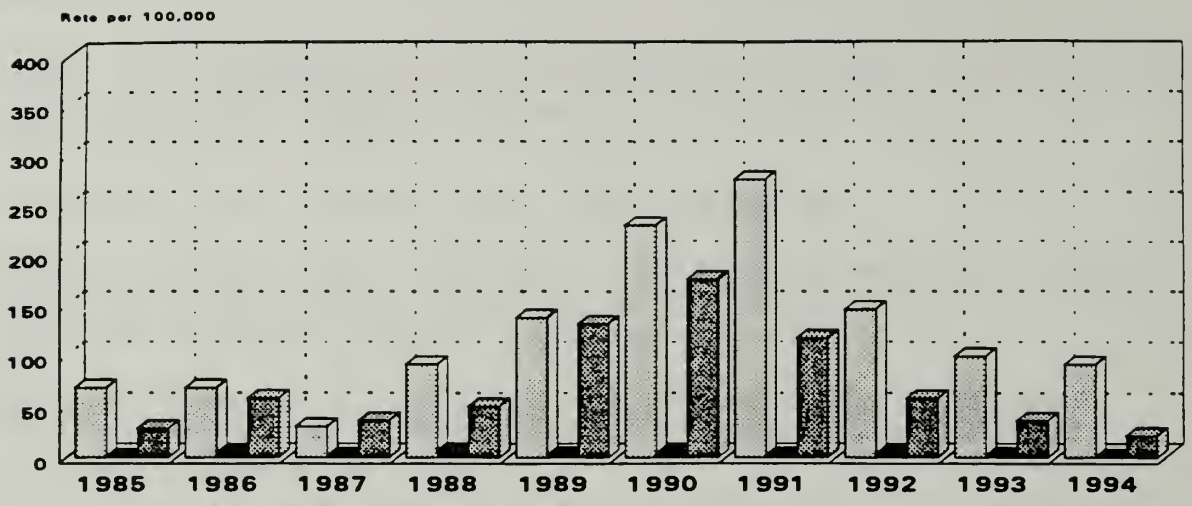
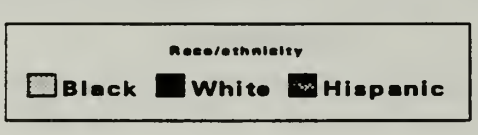
ADDENDUM

Syphilis in Adolescent Women, Ages 15-19

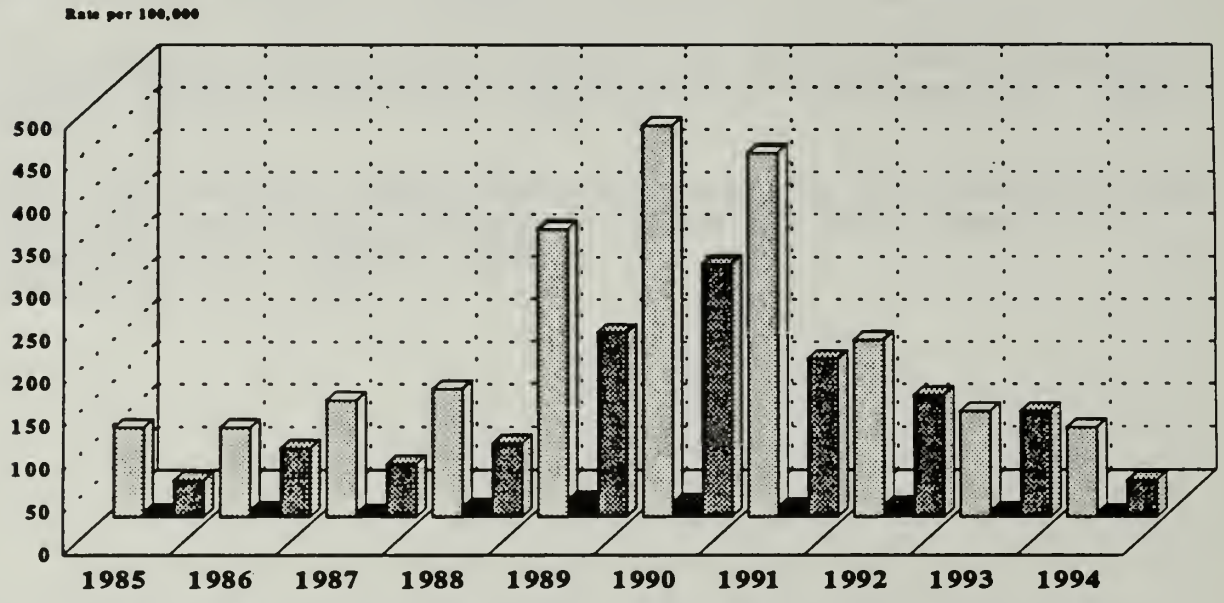


Black	69	69	31	92	138	230	276	146	100	92
White	1	5	2	7	3	4	2	4	2	1
Hispanic	29	59	37	51	132	176	118	59	37	22

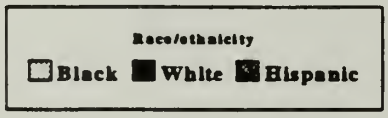


MDPH, STD Division

Syphilis in Women, Ages 20-24

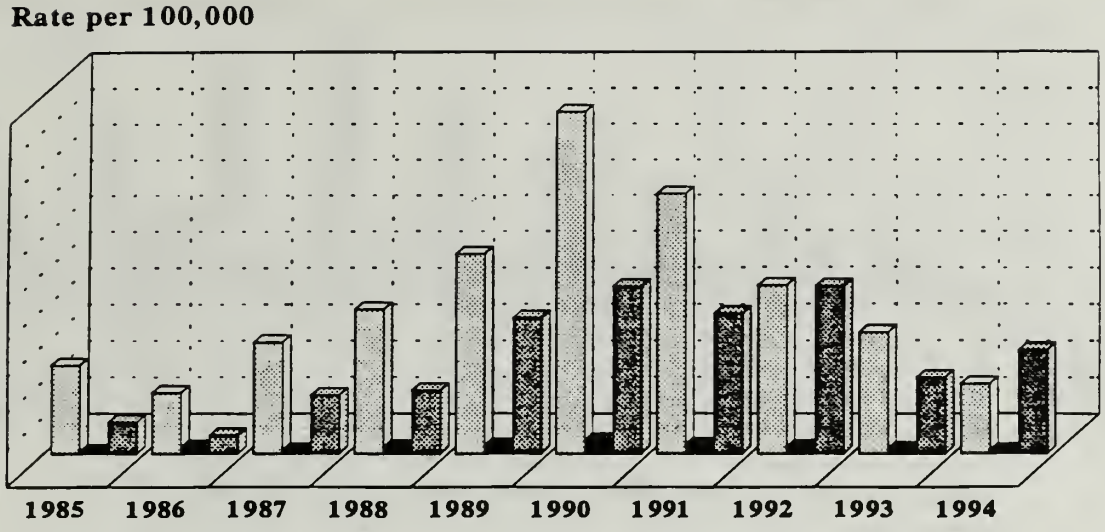


Black	104	104	136	149	337	460	427	207	123	104
White	6	8	5	12	20	17	12	14	7	5
Hispanic	43	80	62	86	216	296	185	142	123	43



MDPH STD Division

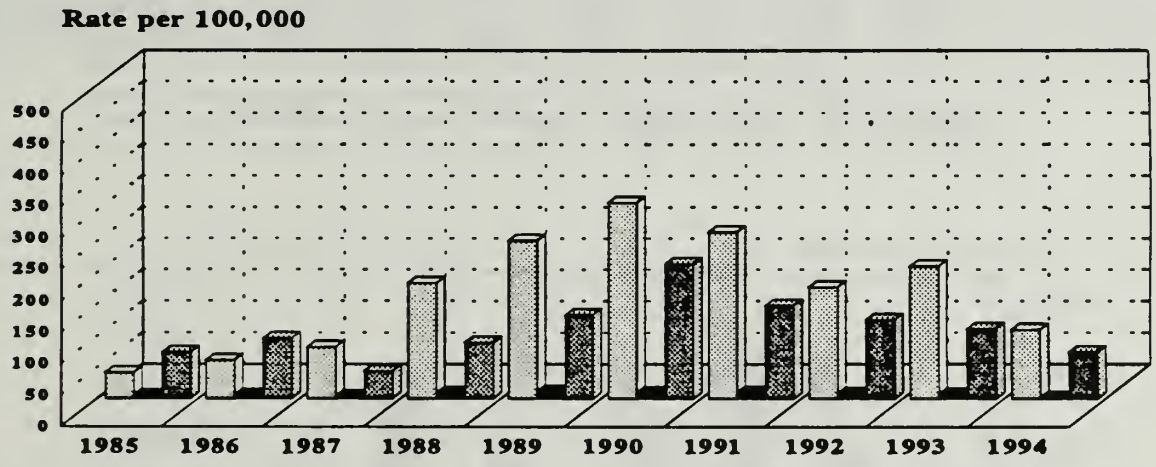
Syphilis in Women, Ages 25-29



Black	121	83	153	198	274	472	357	230	166	96
White	3	9	5	9	11	18	12	9	6	4
Hispanic	43	25	80	87	186	229	192	229	105	142

MDPH STD Division

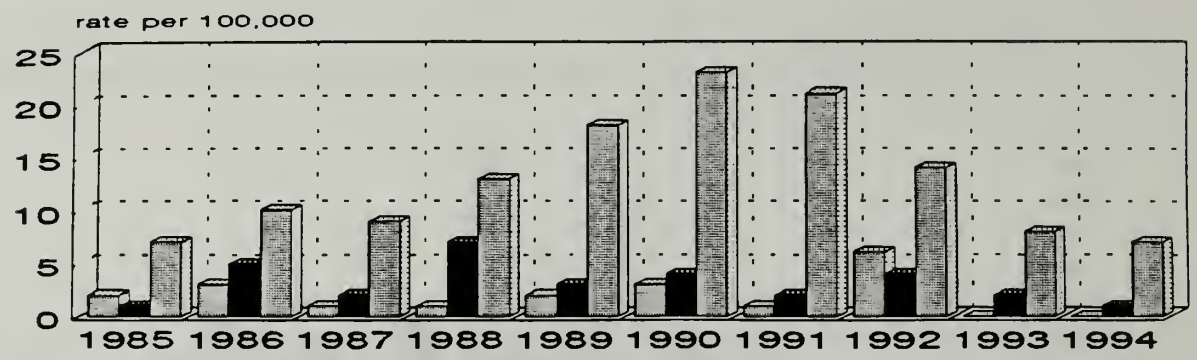
Syphilis in Women, Ages 30-34



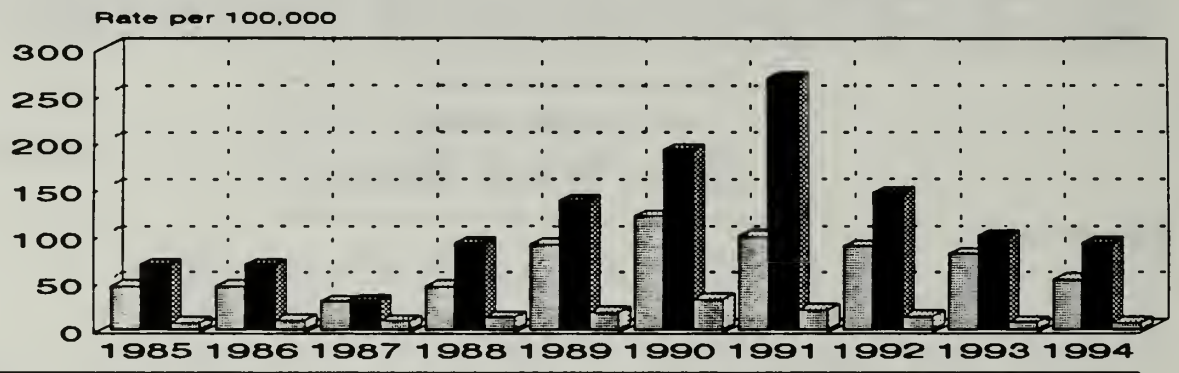
Black	41	61	82	183	251	312	265	177	210	109
White	5	6	4	9	11	9	10	8	7	2.5
Hispanic	74	96	44	89	133	214	148	125	111	74

MDPH STD Division

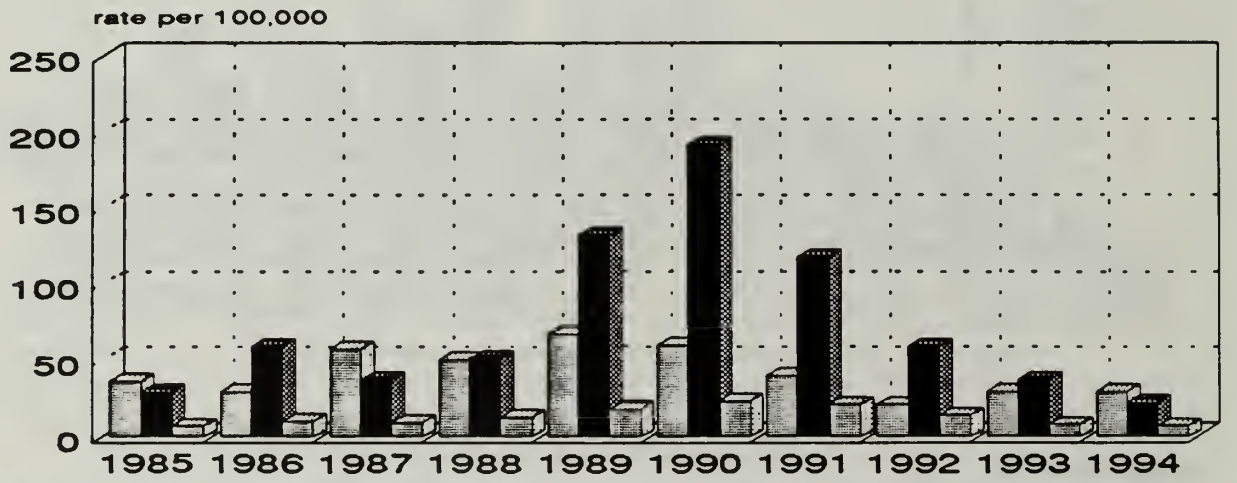
Massachusetts Syphilis 1985-1994
By Gender and Race, ages 15-19 Years



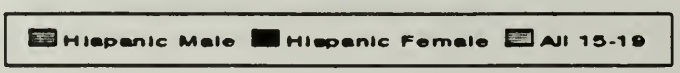
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
White Male	2	3	1	1	2	3	1	6	0	0
White Female	1	5	2	7	3	4	2	4	2	1
All 15-19	7	10	9	13	18	23	21	14	8	7



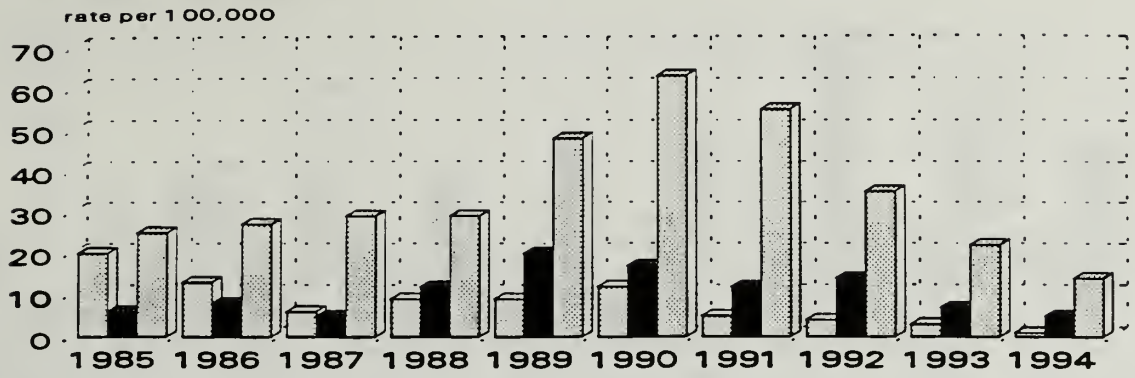
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Black Male	46	46	30	46	91	121	99	89	80	53
Black Female	69	69	31	92	138	192	268	146	100	92
All 15-19	7	10	9	13	18	32	21	14	8	7



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Hispanic Male	36	29	57	50	67	60	40	21	29	29
Hispanic Female	29	59	37	51	132	191	118	59	37	22
All 15-19	7	10	9	13	18	23	21	14	8	7

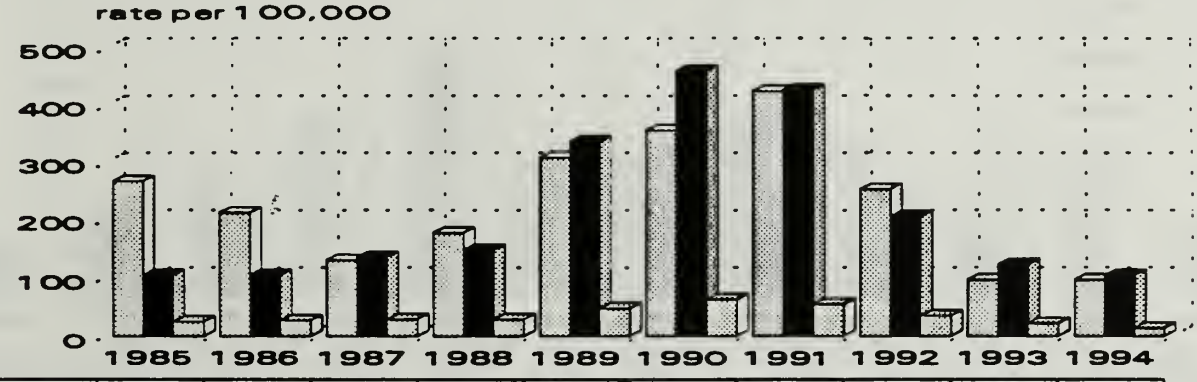


Massachusetts Syphilis 1985-1994
By Gender and Race, ages 20-24 Years



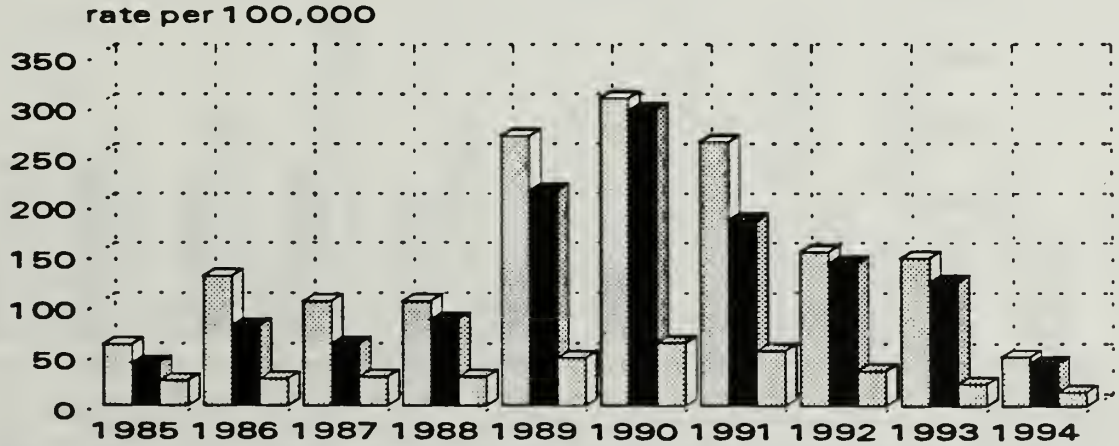
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
White Male	20	13	6	9	9	12	5	4	3	1
White Female	6	8	5	12	20	17	12	14	7	5
All 20-24	25	27	29	29	48	63	55	35	22	14

White Male White Female All 20-24



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Black Male	268	213	130	178	309	357	425	254	96	96
Black Female	104	104	136	149	337	460	427	207	123	104
All 20-24	25	27	29	29	48	63	55	35	22	14

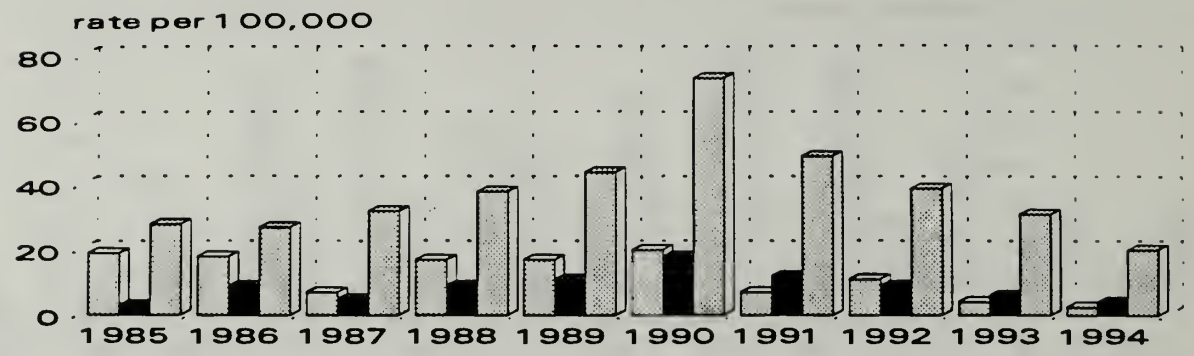
Black Male Black Female All 20-24



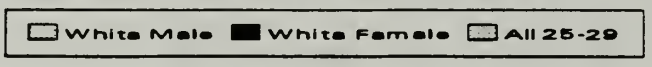
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Hispanic Male	61	129	104	104	270	308	264	153	147	49
Hispanic Female	43	80	62	86	215	296	185	142	123	43
All 20-24	25	27	29	29	48	63	55	35	22	14

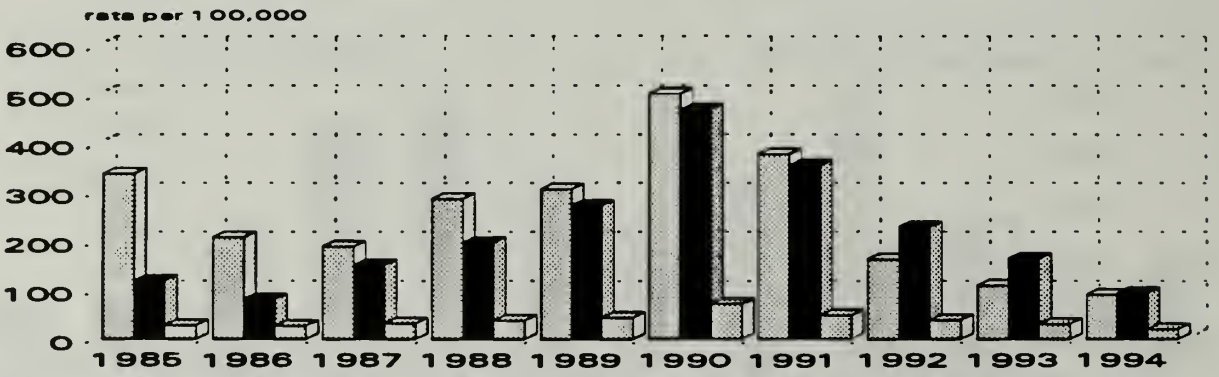
Hispanic Male Hispanic Female All 20-24

Massachusetts Syphilis 1985-1994
By Gender and Race, ages 25-29 Years

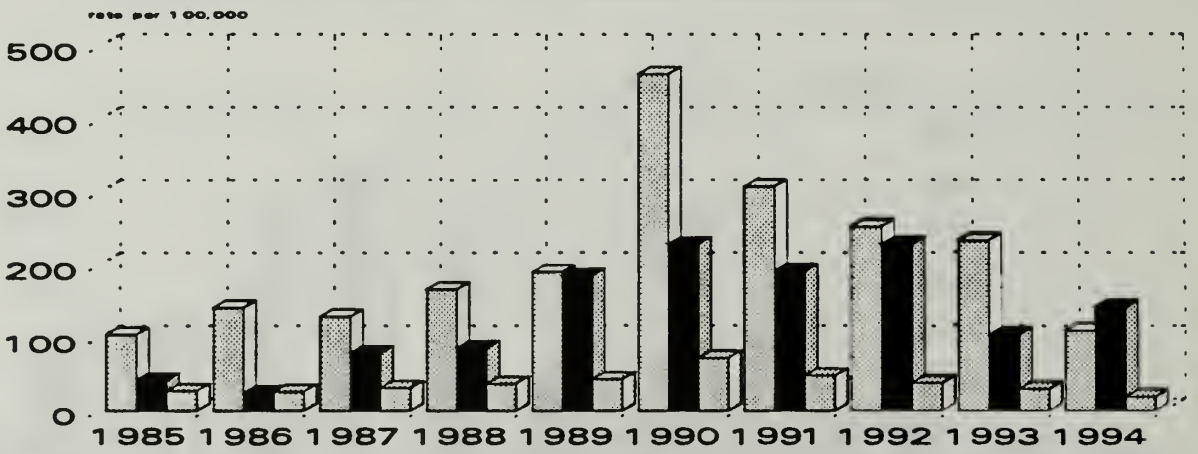


	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
White Male	19	18	7	17	17	20	7	11	4	2.5
White Female	3	9	5	9	11	18	12	9	6	4
All 25-29	28	27	32	38	44	73	49	39	31	20

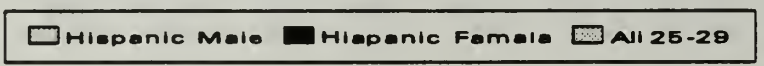




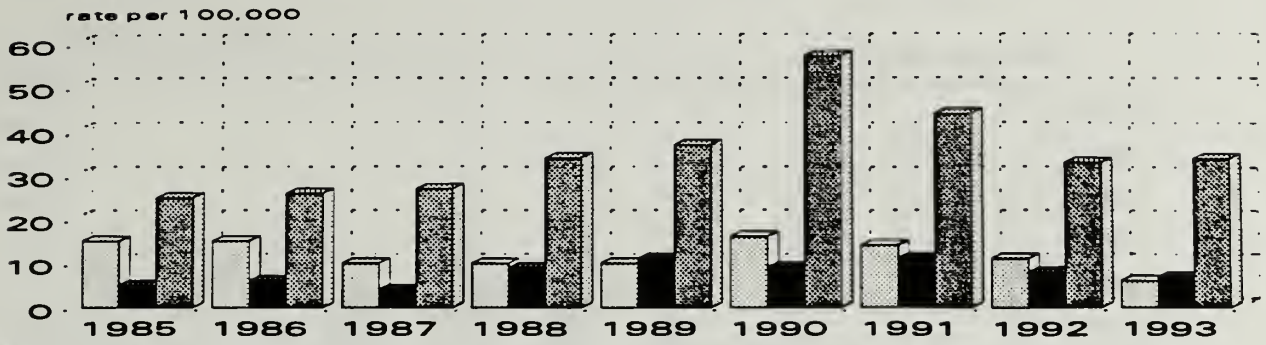
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Black Male	340	209	190	288	308	504	380	164	111	92
Black Female	121	83	153	198	274	472	357	230	166	96
All 25-29	28	27	32	38	44	73	49	39	31	20



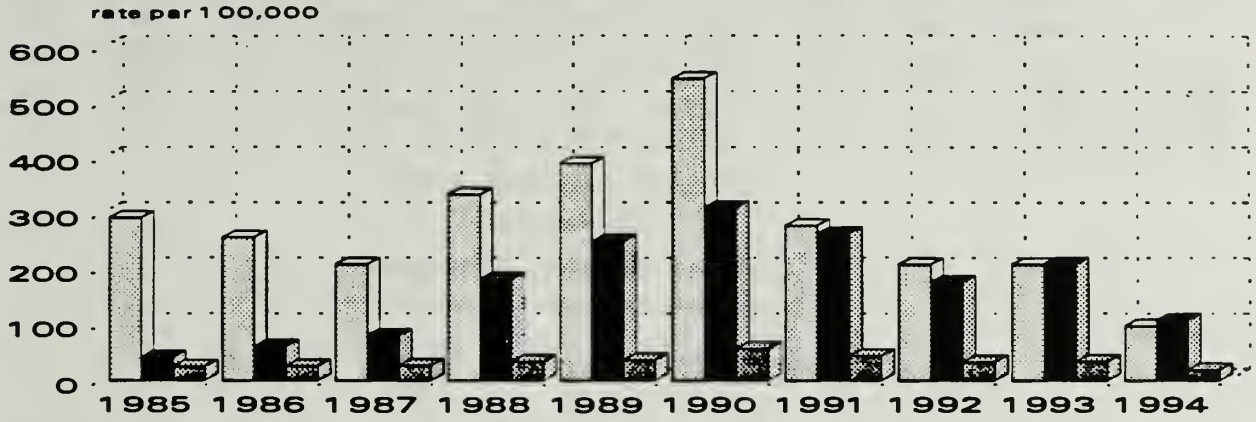
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Hispanic Male	105	142	130	167	191	463	308	253	234	111
Hispanic Female	43	25	80	87	186	229	192	229	106	142
All 25-29	28	27	32	38	44	73	49	39	31	20



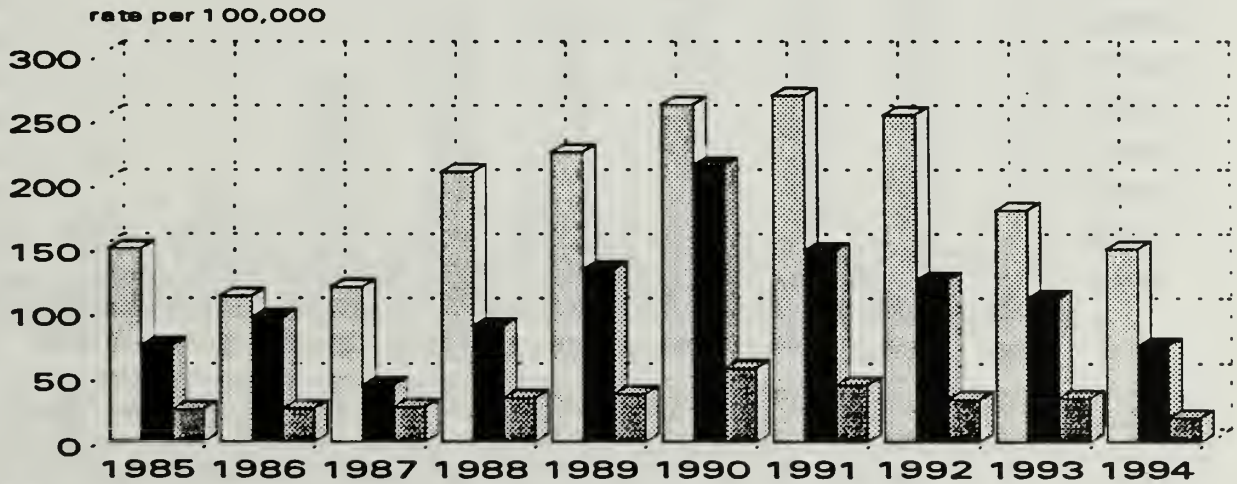
Massachusetts Syphilis 1985-1994
By Gender and Race, ages 30-34 Years



White Male	15	15	10	10	10	16	14	11	6
White Female	5	6	4	9	11	9	11	8	7
All 30-34	25	26	27	34	37	57	44	33	34

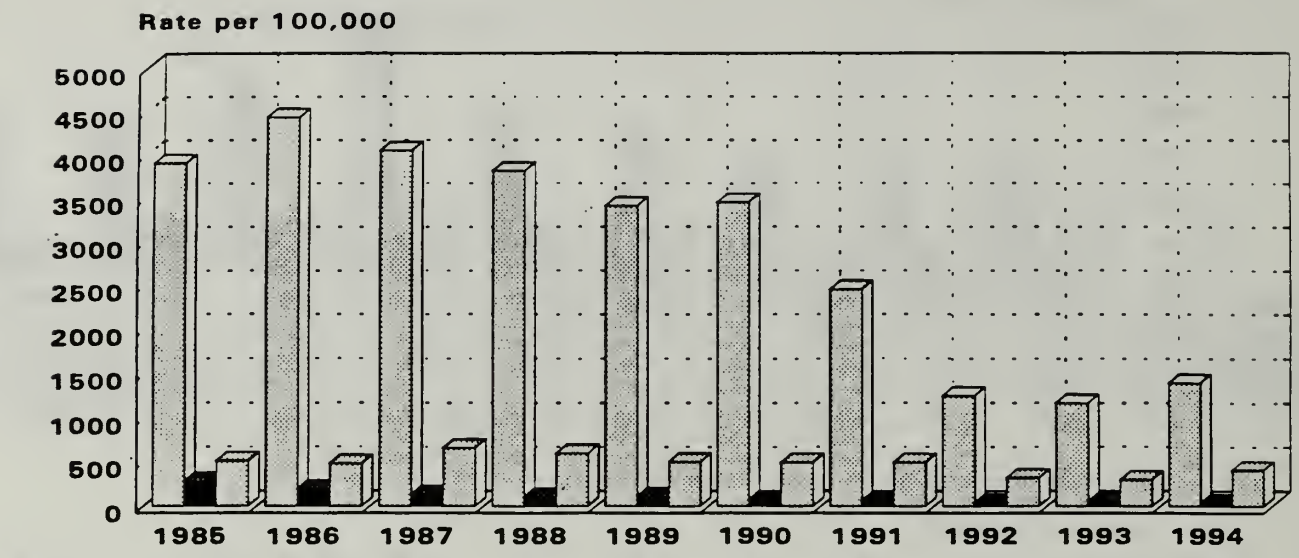


Black Male	293	258	209	335	391	544	279	209	209	98
Black Female	41	61	81	183	251	312	265	177	210	109
All 30-34	25	26	27	34	37	57	44	33	34	19



Hispanic Male	149	112	119	209	224	261	268	253	179	149
Hispanic Female	74	96	44	89	133	214	148	125	111	74
All 30-34	25	26	27	34	37	57	44	33	34	19

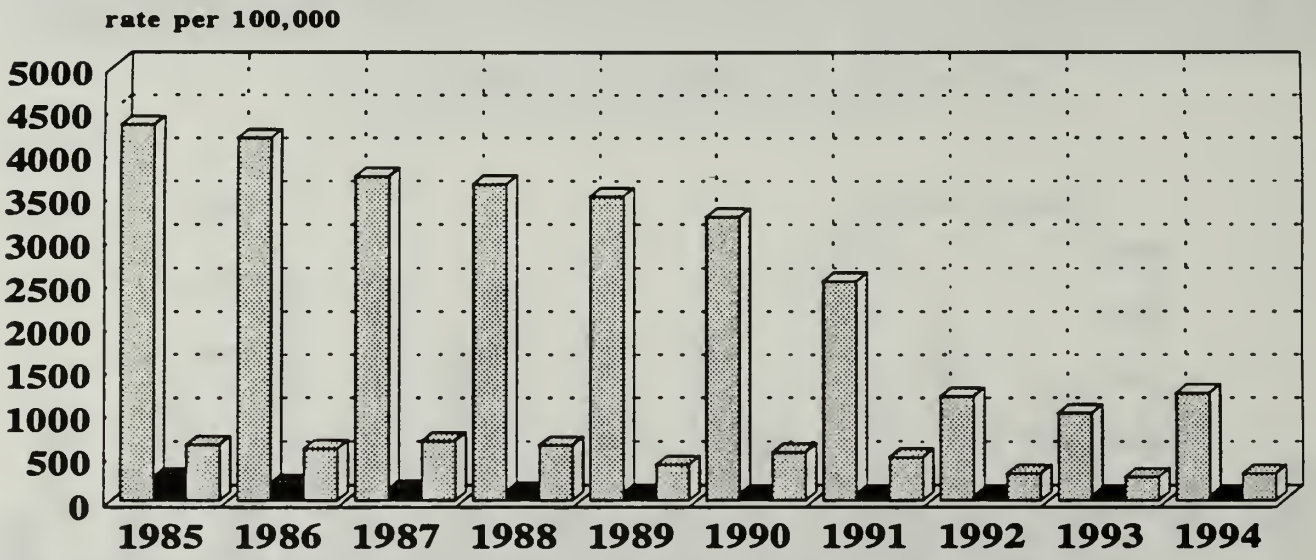
Gonorrhea In Adolescent Women, ages 15-19



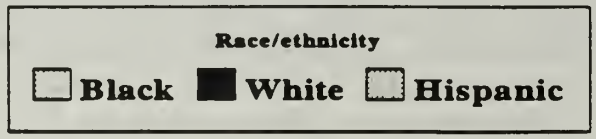
Black	3909	4438	4055	3817	3418	3457	2461	1257	1173	1403
White	284	195	140	104	112	77	67	44	55	44
Hispanic	515	485	662	603	507	500	500	323	301	412

mdph, std division

Gonorrhea in Women, ages 20-24

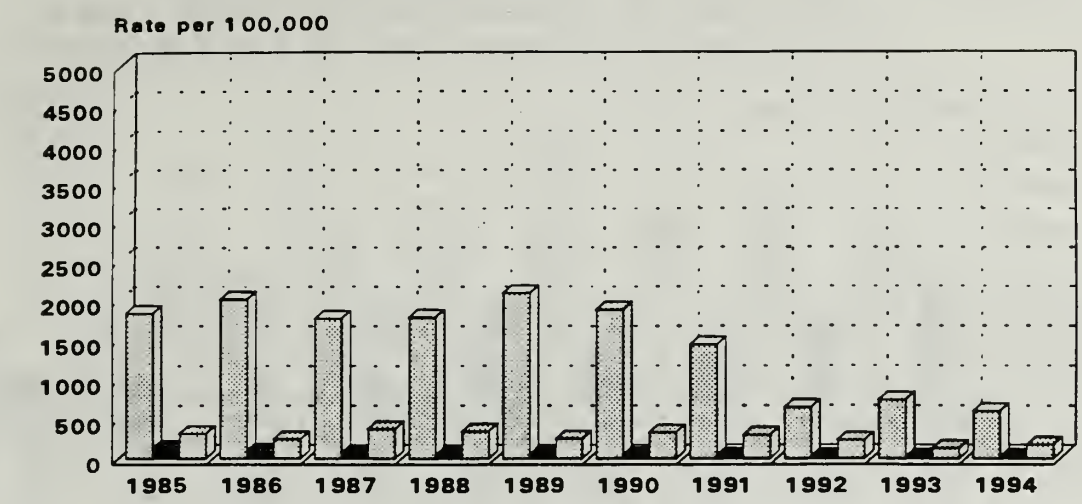


Black	4330	4175	3728	3638	3495	3262	2524	1191	998	1230
White	272	201	133	108	87	80	78	45	51	54
Hispanic	635	592	679	629	407	549	494	308	271	308



MDPH STD Division

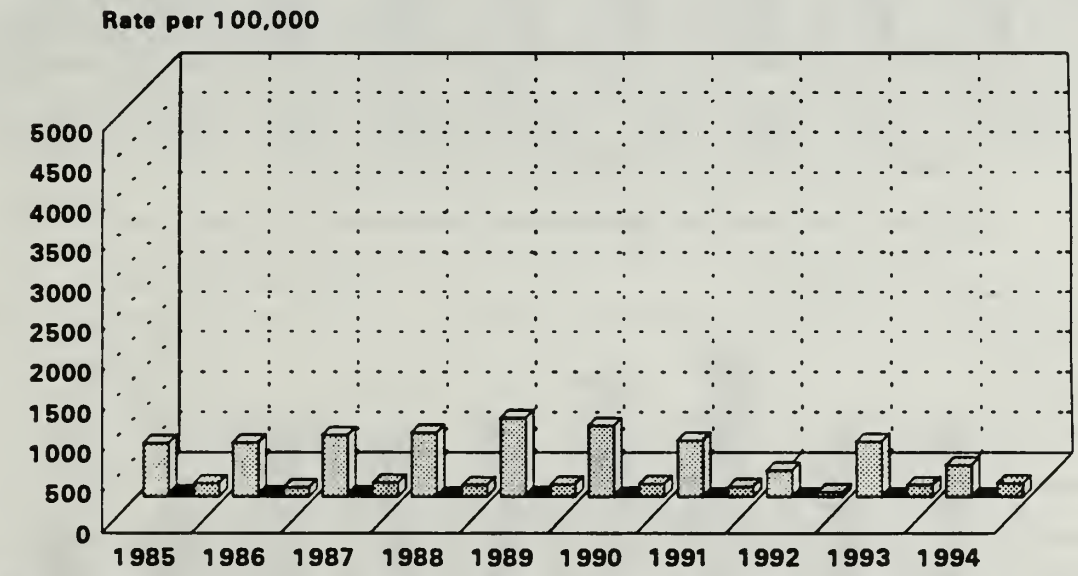
Gonorrhea In Women Ages 25-29



Black	1837	2016	1773	1786	2092	1882	1442	651	746	606
White	137	89	75	48	50	44	35	26	26	22
Hispanic	316	248	378	347	254	334	303	235	130	180

mdph, std division

Gonorrhea In Women Ages 30-34

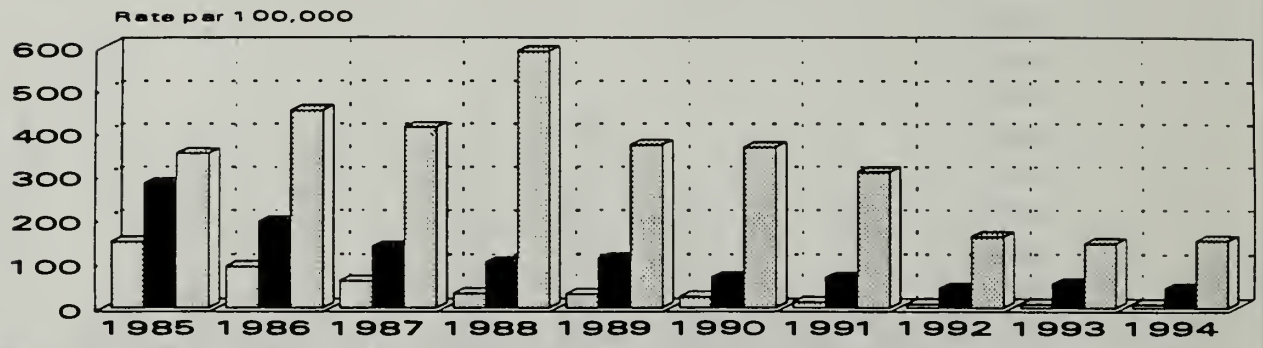


Black	665	672	767	794	978	883	699	326	686	394
White	45	38	32	19	26	23	15	11	12	14
Hispanic	170	118	177	148	155	182	125	59	148	170

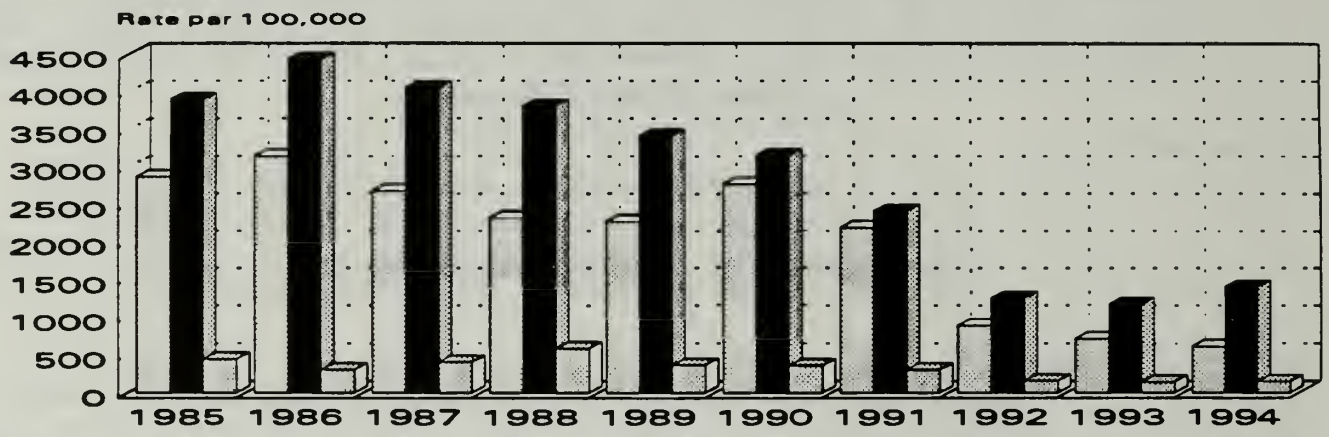
mdph, std division

USE TABLE TO COMPARE GROUPS

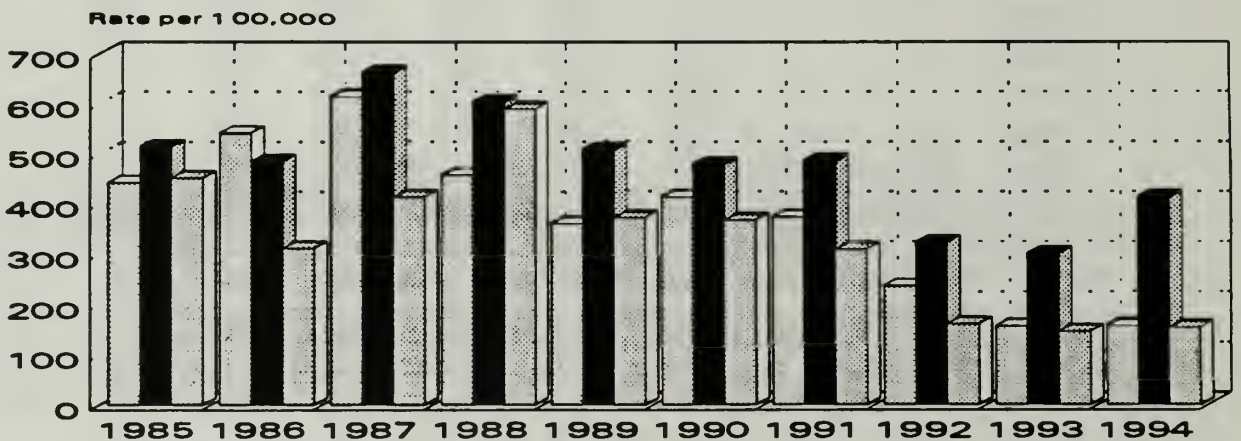
Massachusetts Gonorrhea 1985-1994
By Gender and Race, ages 15-19 Years



White Male	149	94	61	33	31	25	13	8	8	8
White Female	284	195	140	104	112	70	68	44	55	44
All 15-19	352	452	413	589	371	366	308	161	146	153



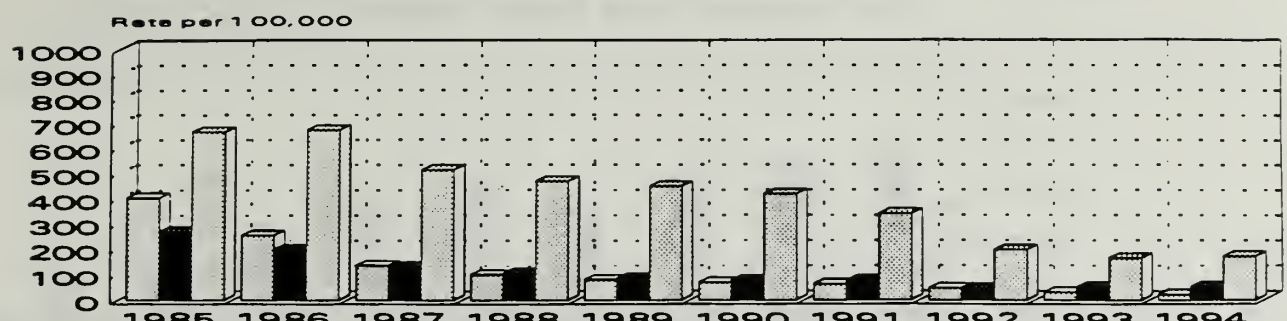
Black Male	2878	3151	2688	2331	2278	2779	2201	892	721	615
Black Female	3909	4438	4055	3817	3418	3158	2422	1257	1173	1403
All 15-19	452	311	413	589	371	366	308	161	146	153



Hispanic Male	443	542	614	457	360	413	373	236	157	157
Hispanic Female	515	485	662	603	507	478	485	323	301	412
All 15-19	452	311	413	589	371	366	308	161	146	153

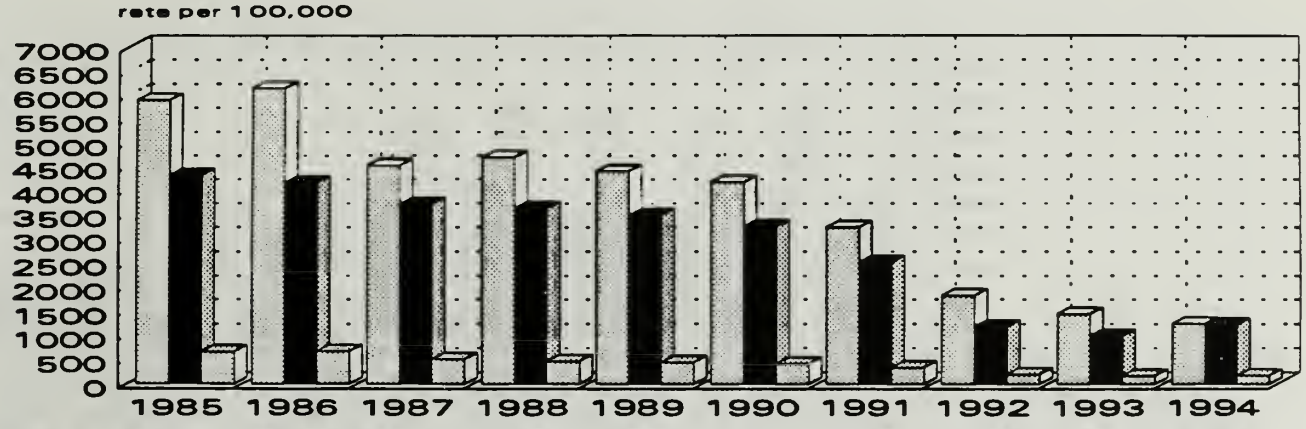
USE TABLES TO COMPARE GROUPS

Massachusetts Gonorrhea 1985-1994
By Gender and Race, ages 20-24 Years



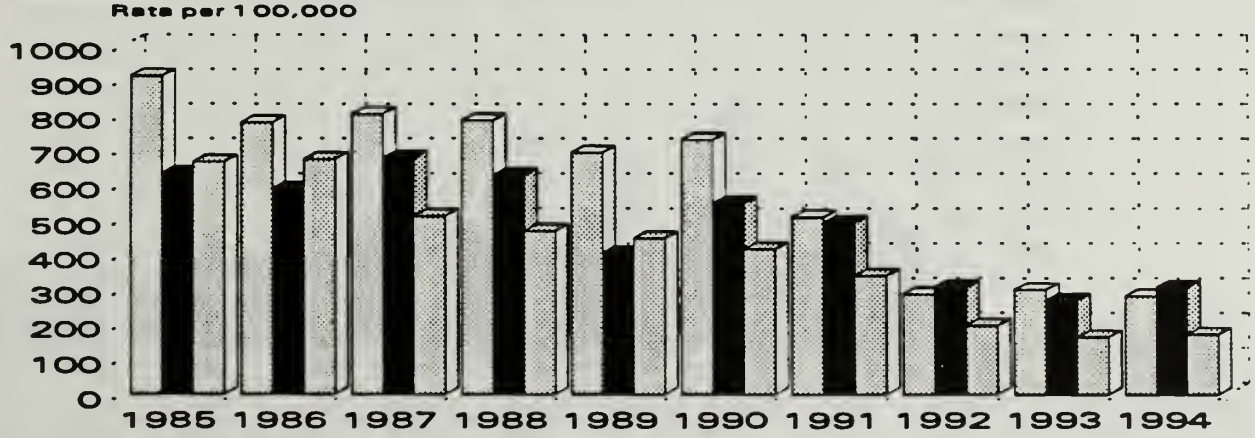
white Male	404	256	137	101	80	69	63	46	31	22
white Female	272	201	133	108	87	80	78	45	51	54
All 20-24	667	675	513	470	449	418	341	197	165	172

white Male white Female All 20-24



Black Male	5907	6154	4535	4706	4418	4185	3245	1825	1447	1248
Black Female	4330	4175	3728	3638	3495	3262	2524	1191	997	1230
All 20-24	667	675	513	470	449	418	341	197	165	172

Black Male Black Female All 20-24

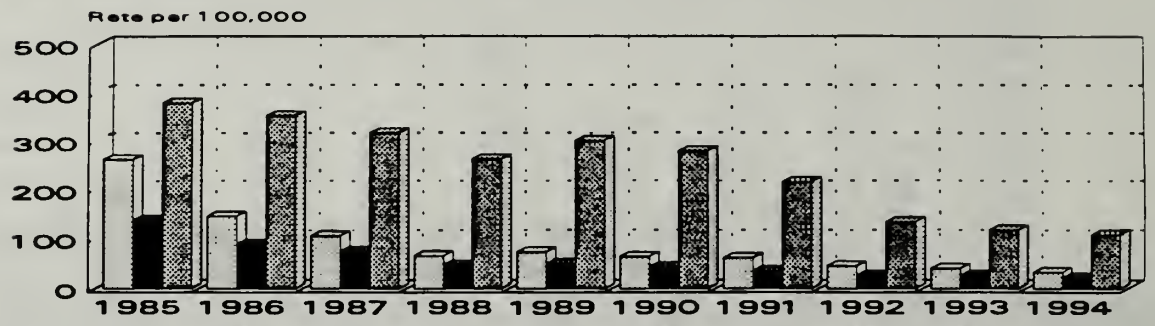


Hispanic Male	915	780	804	786	694	730	509	288	301	282
Hispanic Female	635	592	679	629	407	549	494	308	271	308
All 20-24	667	675	513	470	449	418	341	197	165	172

Hispanic Male Hispanic Female All 20-24

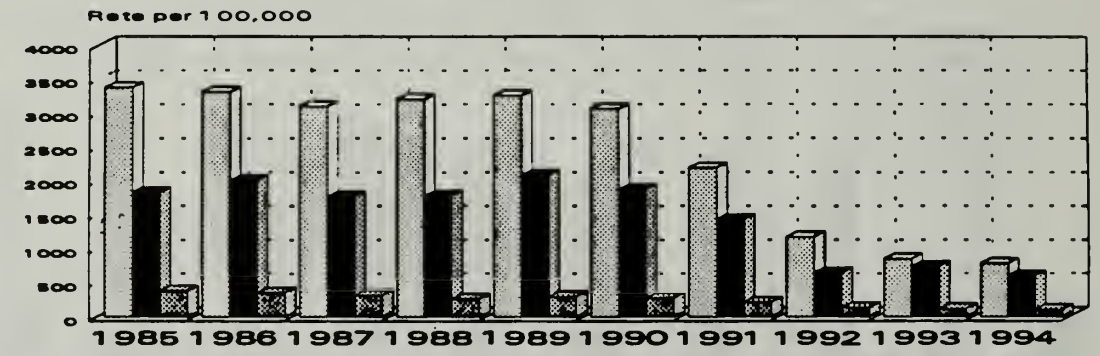
USE TABLES TO COMPARE GROUPS

Massachusetts Gonorrhea 1985-1994
By Gender and Race, ages 25-29 Rates



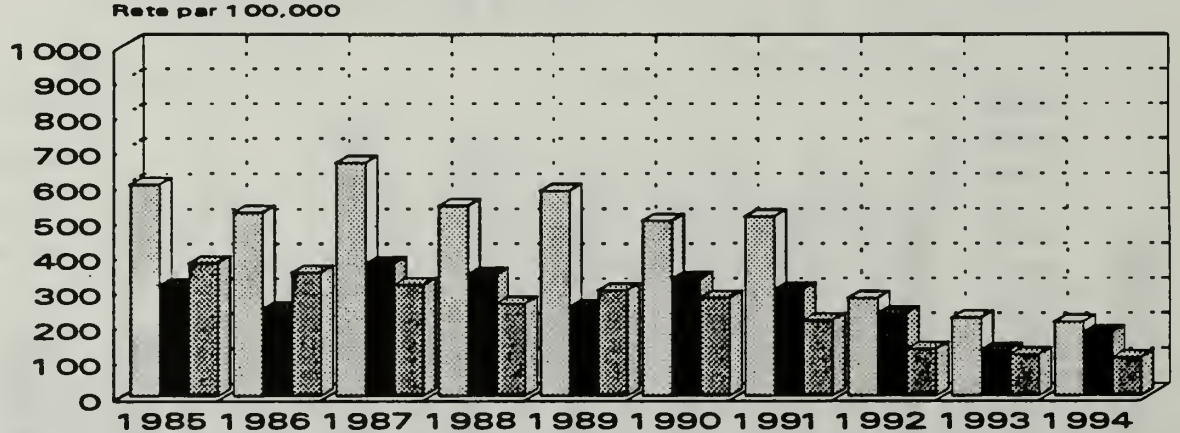
White Male	262	145	105	66	73	64	61	45	40	33
White Female	137	89	75	48	50	44	36	26	26	22
All 25-29	380	353	317	263	301	279	215	133	117	108

White Male White Female All 25-29



Black Male	3391	3319	3109	3214	3266	3069	2199	1185	857	792
Black Female	1837	2016	1773	1786	2092	1882	1442	651	746	606
All 25-29	380	353	317	263	301	279	215	133	117	108

Black Male Black Female All 25-29

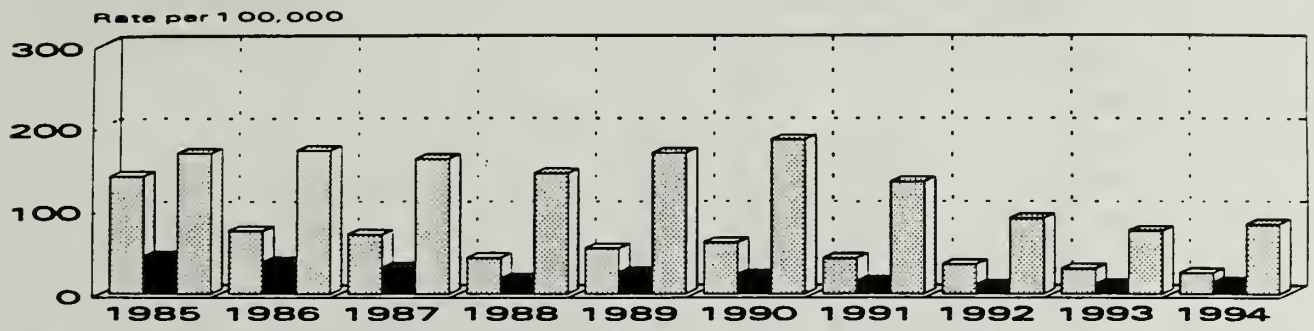


Hispanic Male	604	524	666	543	586	500	512	278	222	210
Hispanic Female	316	248	378	347	254	334	303	235	130	180
All 25-29	380	353	317	263	301	279	215	133	117	108

Hispanic Male Hispanic Female All 25-29

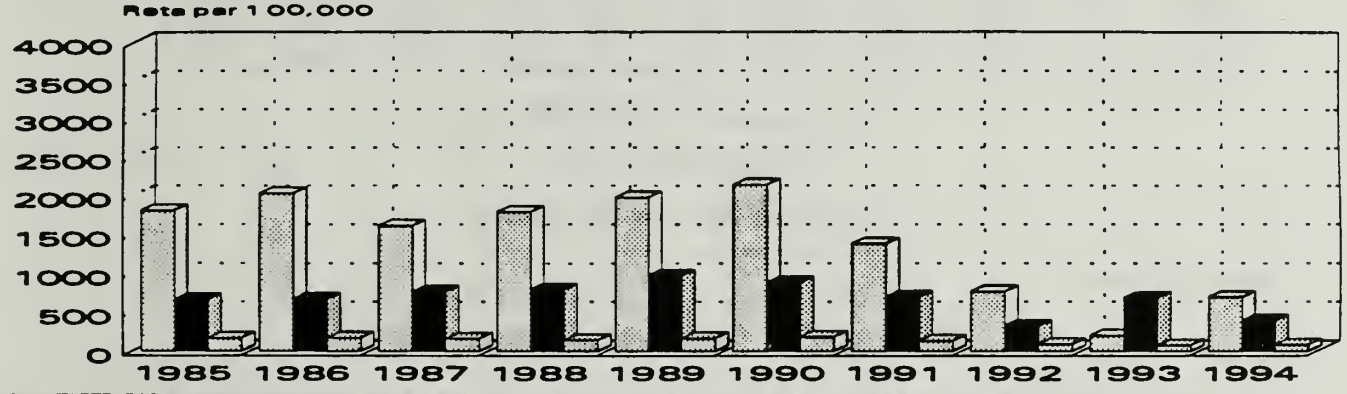
USE TABLES TO COMPARE GROUPS

Massachusetts Gonorrhea 1985-1994
By Gender and Race, ages 30-34 Years



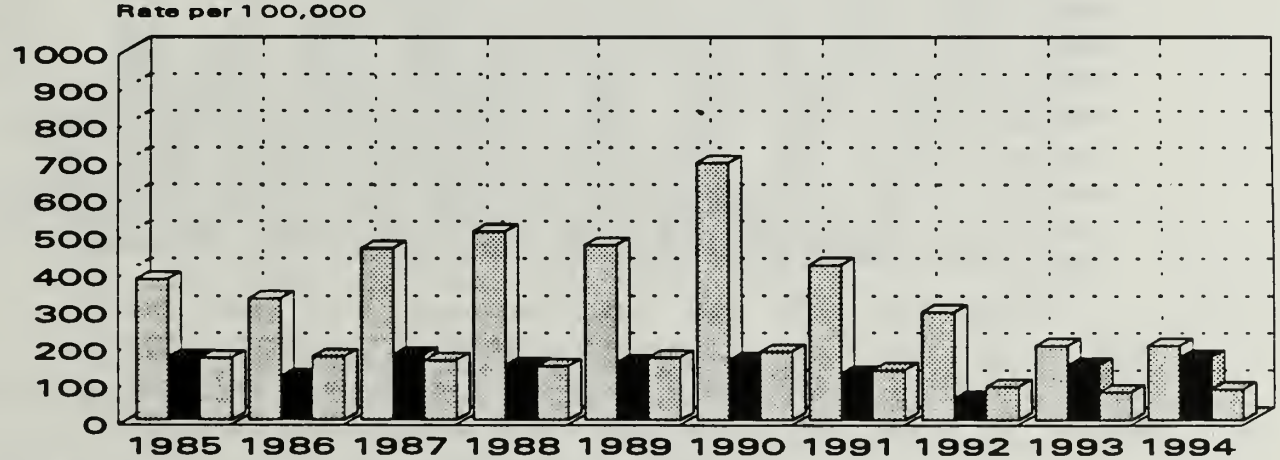
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
White Male	141	75	71	43	54	61	42	35	30	25
White Female	45	38	32	19	26	23	15	11	12	14
All 30-34	168	171	161	144	168	184	134	90	75	83

White Male White Female All 30-34



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Black Male	1614	2037	1618	1799	1966	2149	1388	767	202	691
Black Female	665	672	767	794	978	863	699	326	667	394
All 30-34	166	171	161	144	168	184	134	90	75	83

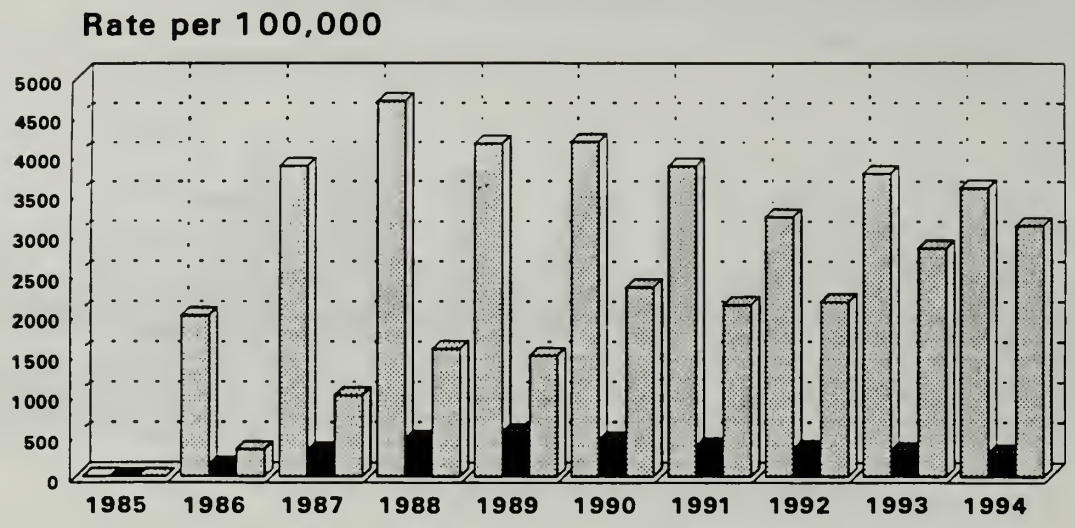
Black Male Black Female All 30-34



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Hispanic Male	380	328	462	507	470	693	417	291	201	201
Hispanic Female	170	118	177	148	155	162	125	59	148	170
All 30-34	168	171	161	144	168	184	134	90	75	83

Hispanic Male Hispanic Female All 30-34

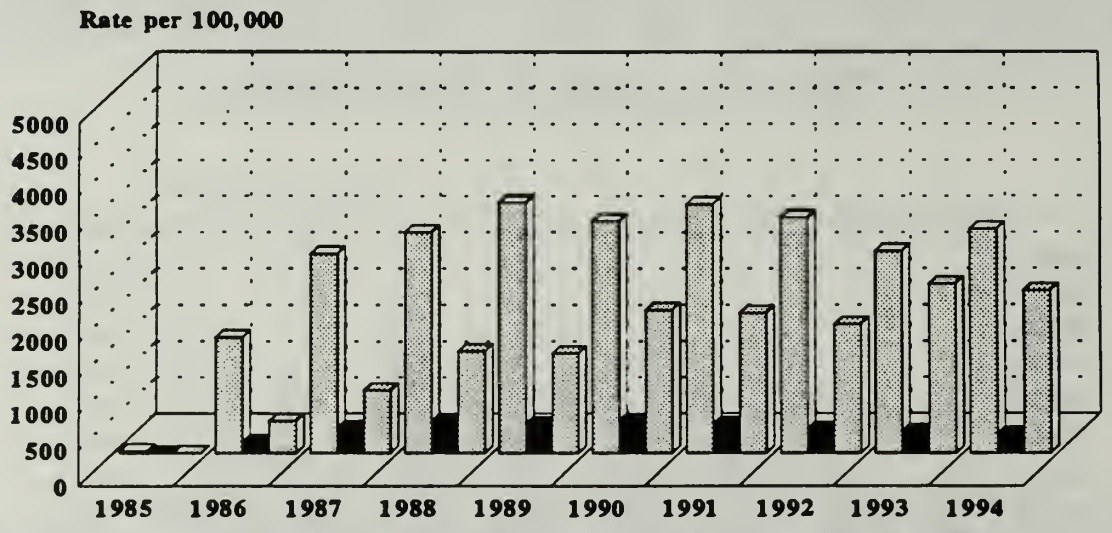
Chlamydia in Adolescent Women, ages 15-19



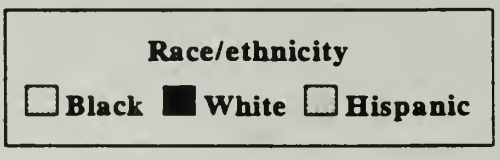
Black	8	2000	3871	4698	4154	4177	3863	3227	3771	3594
White	1	148	325	470	557	455	383	351	326	299
Hispanic	0	338	1007	1588	1499	2352	2131	2168	2844	3123

MDPH STD Division

Chlamydia in Women, Ages 20-24

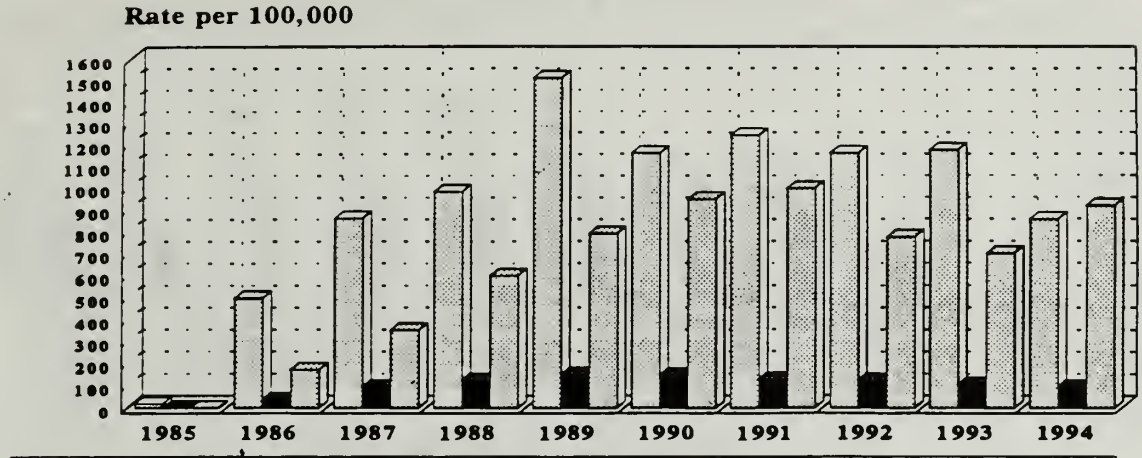


Black	32	1606	2751	3049	3456	3197	3437	3249	2790	3094
White	1	156	350	446	406	450	408	334	303	270
Hispanic	6	444	870	1412	1382	1980	1937	1783	2338	2246

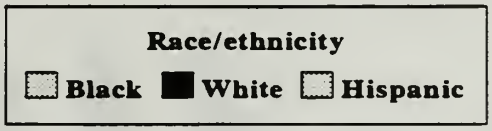


MDPH STD Division

Chlamydia in Women, Ages 25-29

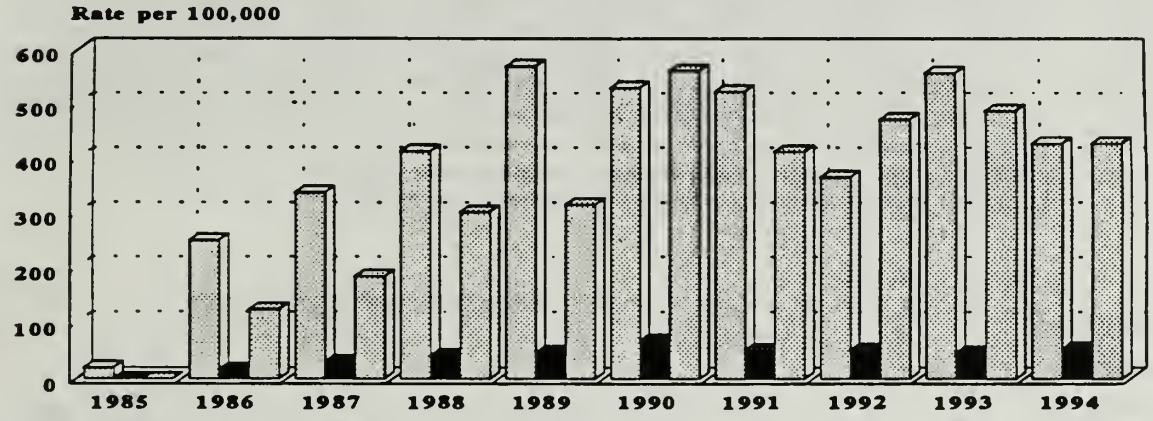


Black	19	498	861	962	1512	1161	1244	1161	1174	855
White	0	37	95	127	152	149	129	125	108	96
Hispanic	0	173	353	601	792	947	997	774	700	916

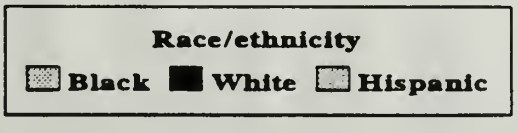


MDPH STD Division

Chlamydia in Women, Ages 30-34



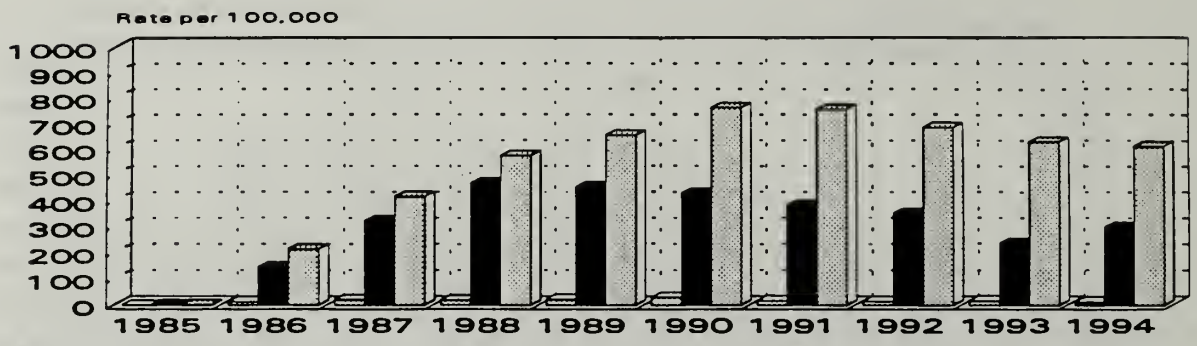
Black	20	251	339	414	570	530	523	387	557	428
White	0	17	32	42	48	89	52	52	47	54
Hispanic	0	125	185	303	317	561	413	472	487	428



MDPH STD Division

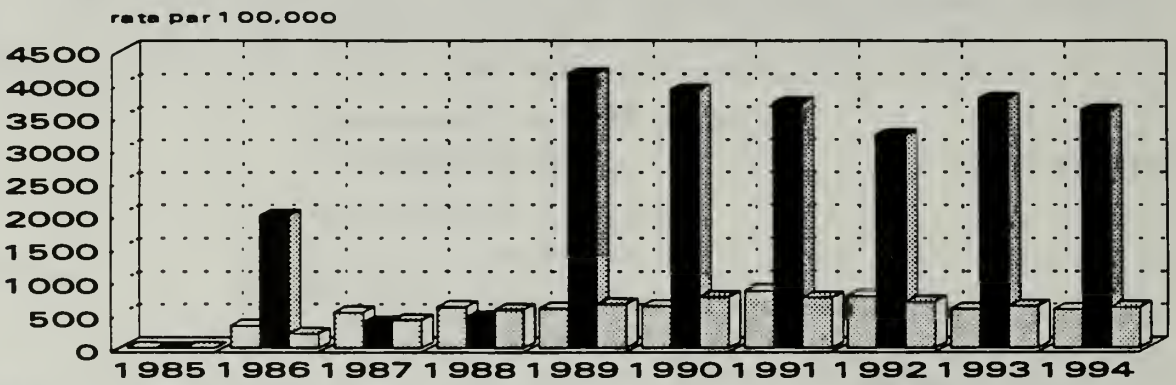
USE TABLES TO COMPARE GROUPS

Massachusetts Chlamydia 1985-1994
By Gender and Race, ages 15-19 Years



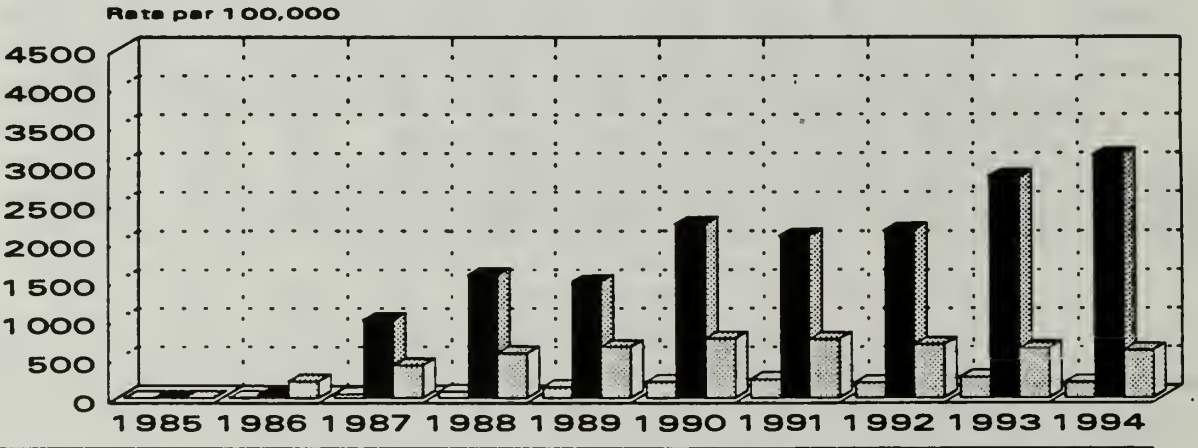
White Male	0	13	21	19	22	30	18	15	17	12
White Female	1	148	325	470	453	428	382	351	236	299
All 15-19	1	214	416	574	654	762	756	685	629	611

White Male White Female All 15-19



Black Male	0	334	532	615	592	628	857	773	585	577
Black Female	8	2000	387	470	4154	3901	3710	3227	3771	3595
All 15-19	1	214	416	574	654	762	756	685	629	611

Black Male Black Female All 15-19

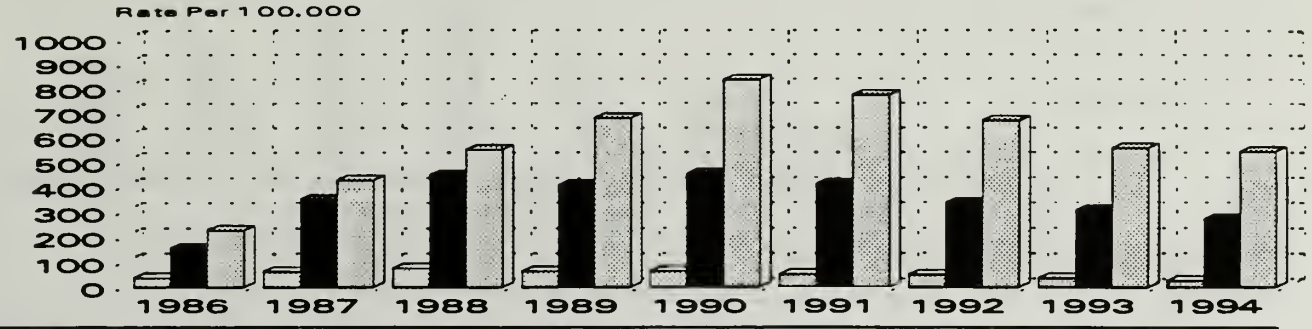


Hispanic Male	0	5	50	79	140	209	240	193	264	199
Hispanic Female	0	47	1007	1588	1499	2249	2095	2168	2845	3123
All 15-19	1	214	416	574	654	762	756	685	629	611

Hispanic Male Hispanic Female All 15-19

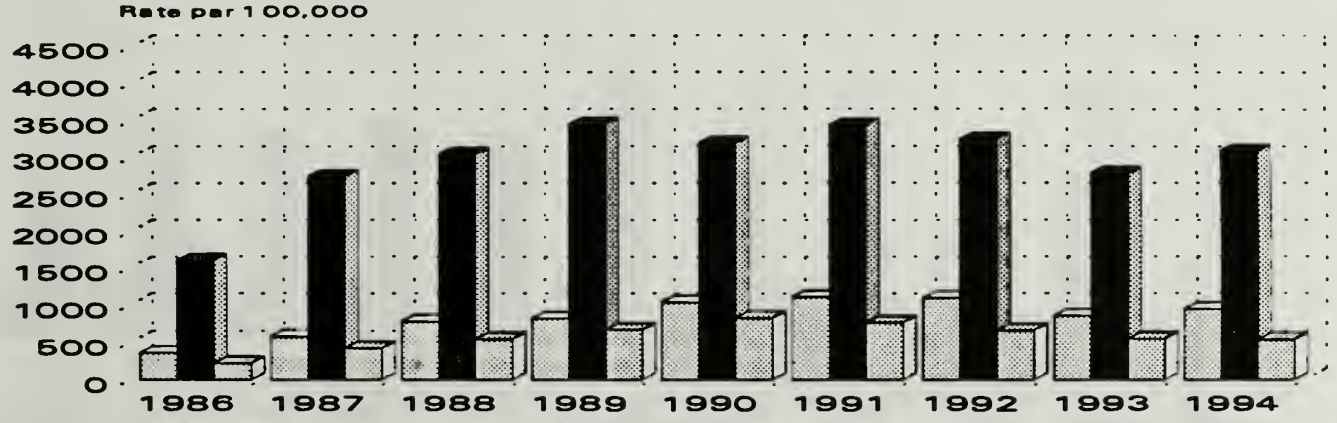
USE TABLES TO COMPARE GROUPS

Massachusetts Chlamydia 1986-1994
By Gender and Race, ages 20-24 Years



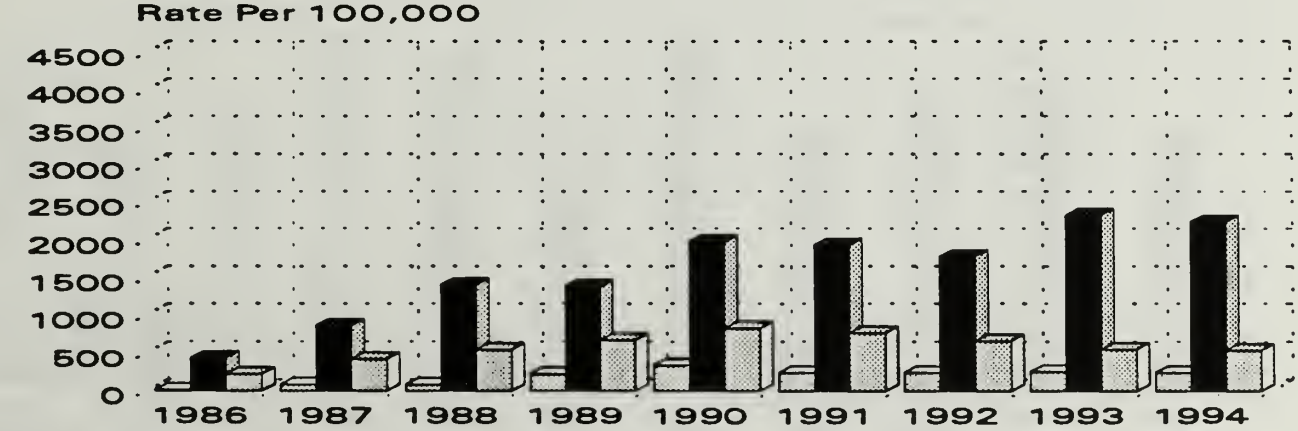
White Male	37	62	76	63	63	51	49	36	26
White Female	156	350	446	406	450	408	334	304	270
All 20-24	226	425	547	675	831	768	663	553	539

White Male White Female All 20-24



Black Male	364	583	782	823	1043	1111	1098	858	947
Black Female	1605	2751	3049	3456	3197	3436	3249	2790	3094
All 20-24	226	425	547	675	831	768	663	553	539

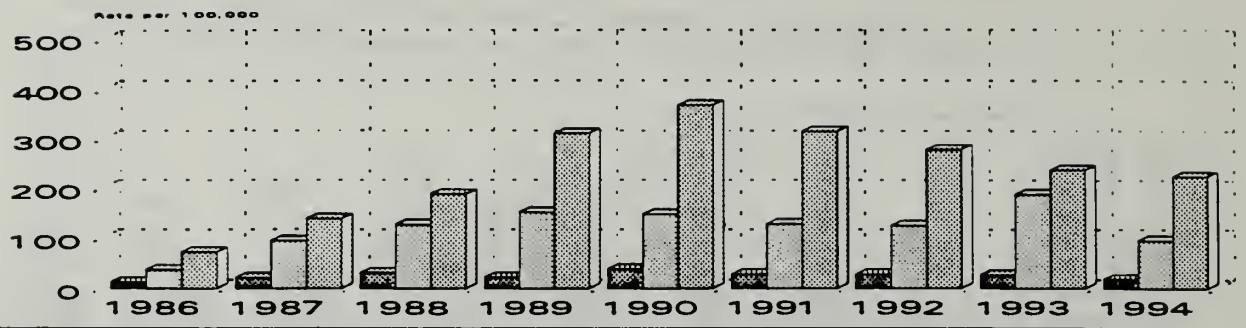
Black Male Black Female All 20-24



Hispanic Male	18	92	86	227	344	246	246	258	246
Hispanic Female	444	870	1413	1382	1980	1937	1783	2338	2246
All 20-24	226	425	547	675	831	768	663	553	539

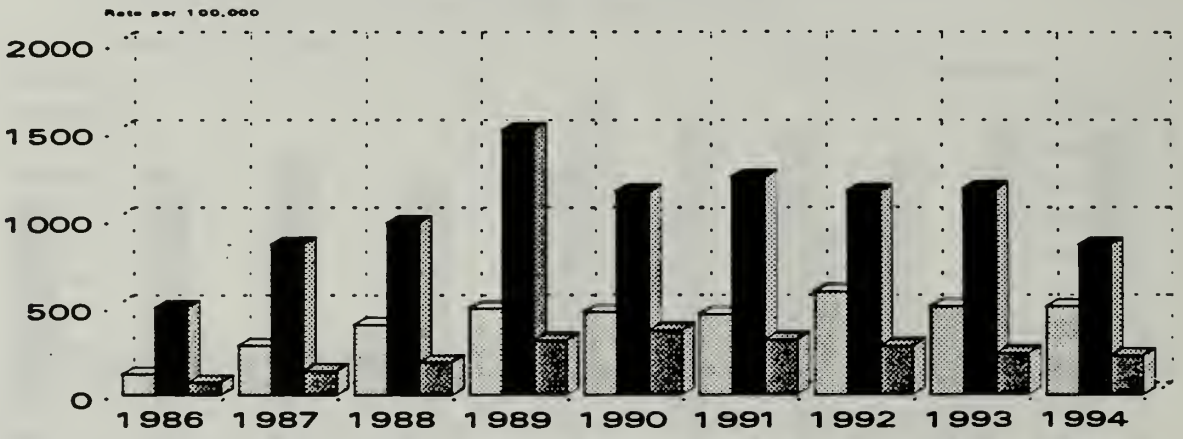
Hispanic Male Hispanic Female All 20-24

USE TABLES TO COMPARE GROUPS
Massachusetts Chlamydia 1986-1994
By Gender, Race And Ages 25-29 Years



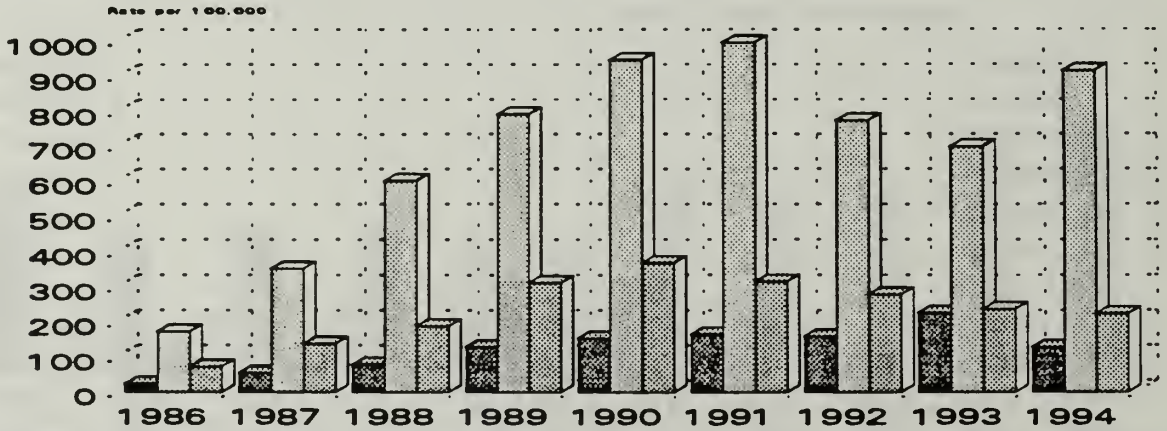
White Male	13	22	32	23	39	29	29	27	19
White Female	37	95	127	152	148	129	125	188	96
All 25-29	73	139	189	312	369	316	279	238	225

White Male White Female All 25-29



Black Male	118	281	399	491	471	458	589	504	504
Black Female	498	861	982	1512	1161	1244	1161	1174	855
All 25-29	73	139	189	312	369	316	279	238	225

Black Male Black Female All 25-29

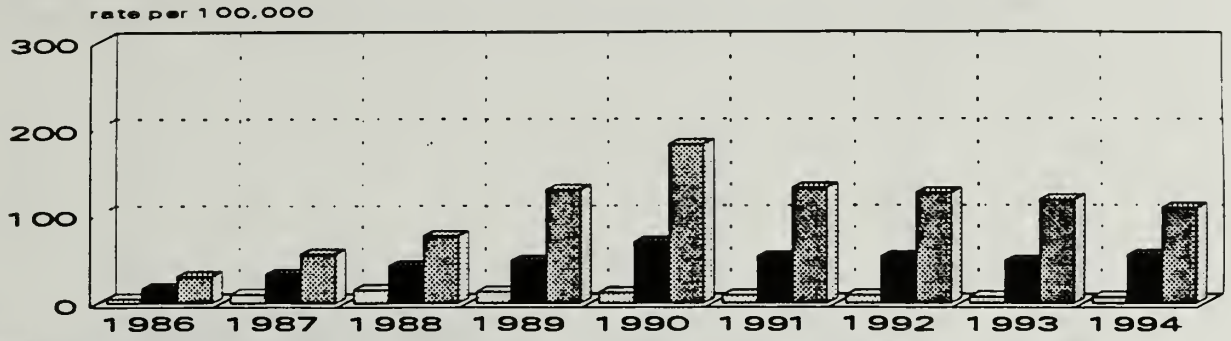


Hispanic Male	25	56	80	130	154	167	160	228	130
Hispanic Female	173	353	601	792	947	997	774	699	916
All 25-29	73	139	189	312	369	316	279	238	225

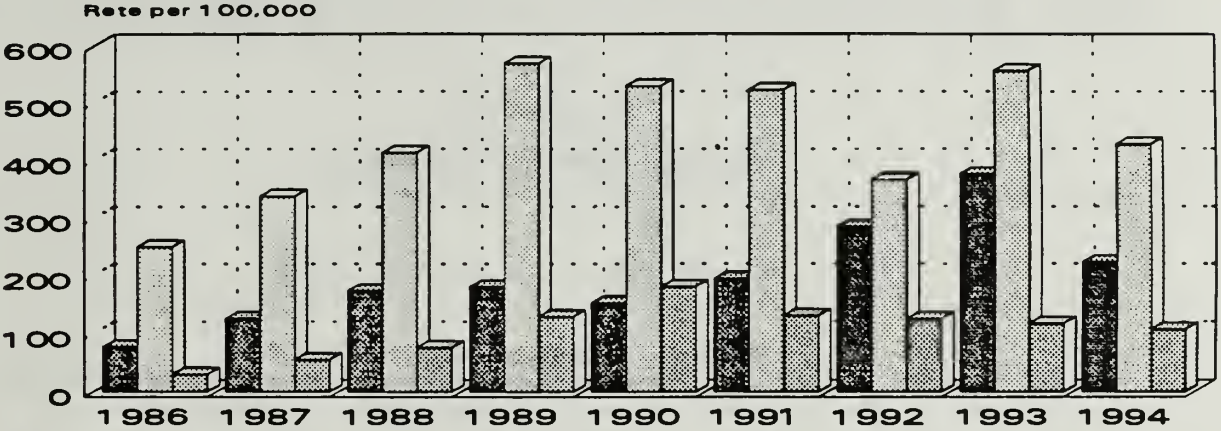
Hispanic Male Hispanic Female All 25-29

USE TABLES TO COMPARE GROUPS

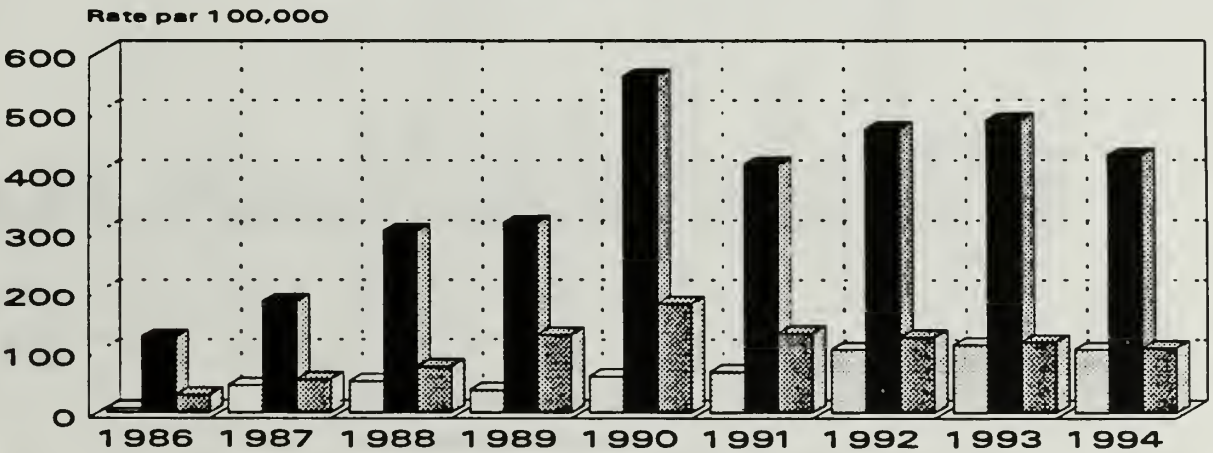
Massachusetts Chlamydia 1986-1994
By Gender and Race, age 30-34 Years



White Male	5	10	15	13	12	9	9	7	7
White Female	17	32	42	48	69	52	52	47	54
All 30-34	30	55	76	129	181	131	125	117	107

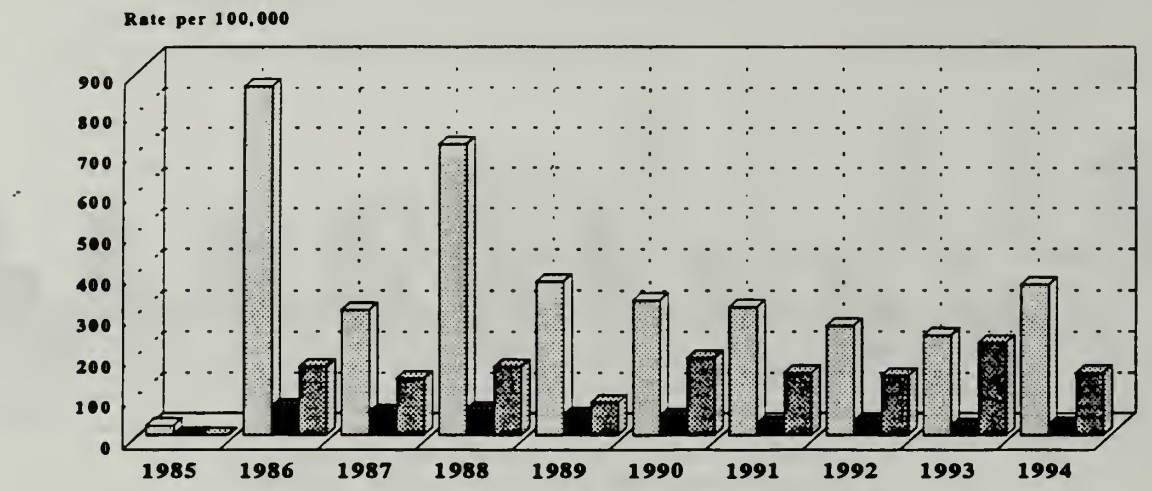


Black Male	77	126	174	181	153	195	286	377	223
Black Female	251	339	414	570	530	523	367	557	428
All 30-34	30	55	76	129	181	131	125	117	107



Hispanic Male	7	45	52	37	60	67	104	112	104
Hispanic Female	125	185	303	317	561	413	472	487	428
All 30-34	30	55	76	129	181	131	125	117	107

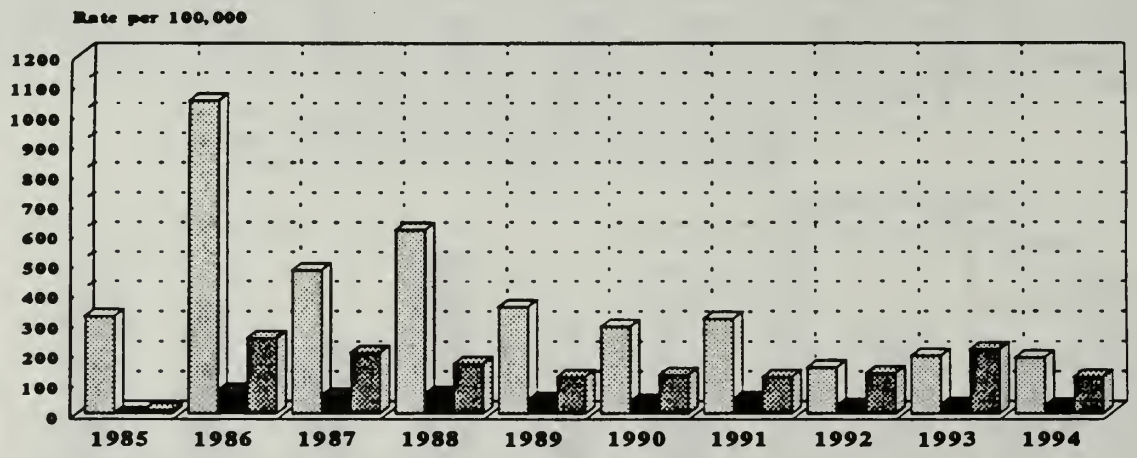
PID in Adolescent Women Ages 15-19



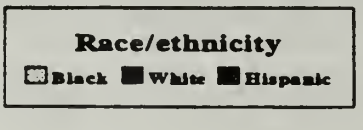
Black	23	858	307	713	376	330	314	268	245	368
White	1	71	57	63	51	47	29	35	23	26
Hispanic	0	169	140	169	81	191	154	147	228	154

MDPH STD Division

PID in Women Ages 20-24

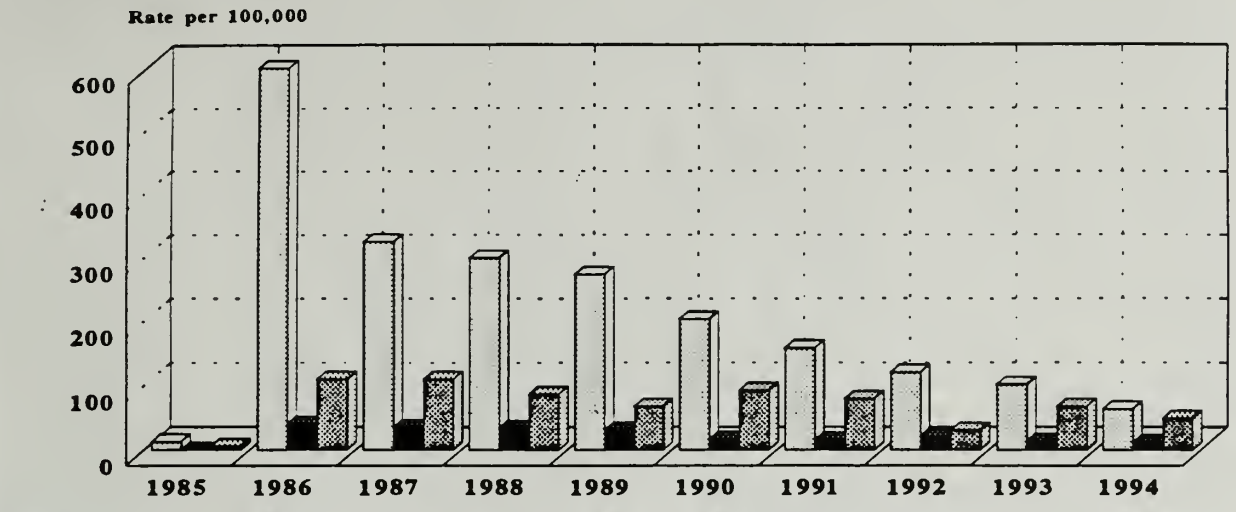


Black	326	1049	479	615	356	291	317	155	194	188
White	0	78	61	67	47	42	49	29	31	27
Hispanic	12	253	204	167	123	130	123	136	216	123



MDPH STD Division

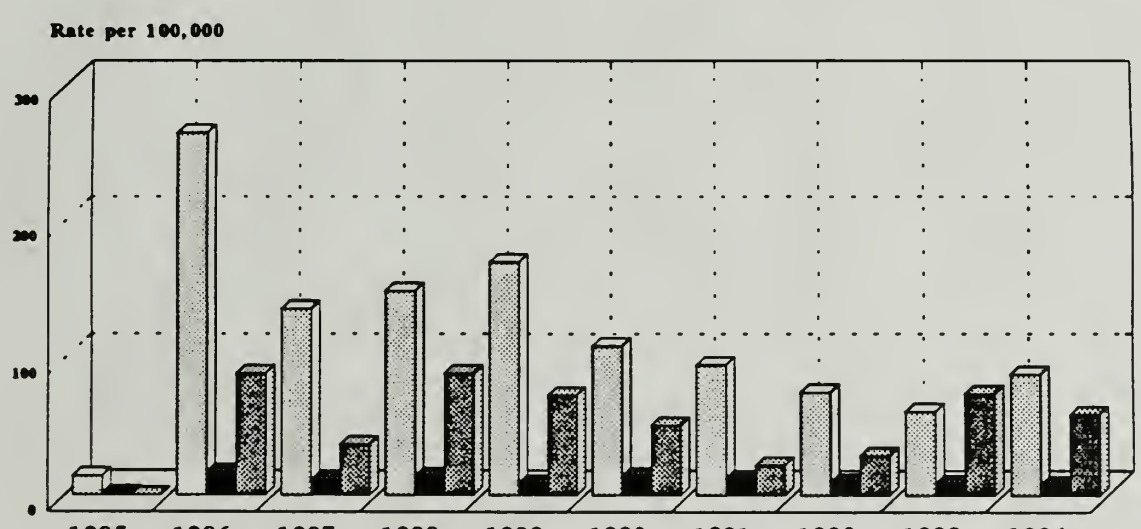
PID in Women Ages 25-29



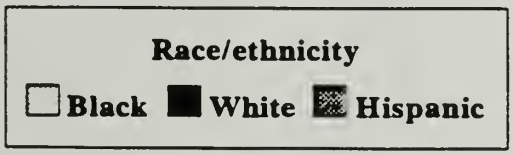
Black	13	600	325	300	274	204	159	121	102	64
White	0	41	36	35	32	17	16	22	14	12
Hispanic	6	111	111	87	68	93	80	31	68	50

MDPH STD Division

PID in Women Ages 30-34



Black	14	265	136	149	170	109	95	75	61	88
White	1	17	11	14	9	14	12	10	9	8
Hispanic	0	89	37	89	73	51	22	29	74	59



MDPH STD Division